THE

Journal of the American Medical Association.

EDITED UNDER THE DIRECTION OF THE BOARD OF TRUSTEES.

PUBLISHED WEEKLY.

VOL. XVI. CHICAGO, MARCH 14, 1891. NO 11.

ADDRESSES.

PHTHISIS PULMONALIS.

An Address delivered before the King's County Medical Association.

BY WM. McCOLLOM, M.D.,

OF BROOKLYN, N. Y.

THE RETIRING PRESIDENT.

I have chosen as a subject for the address which I offer you this evening, the very old and deeply interesting one of "phthisis pulmonalis," a subject which has, perhaps, occupied the attention of the profession and called forth more earnest, active effort for its solution for centuries, than any other subject in medicine; and yet its ravages have not been checked to any considerable extent, for it destroys more life in almost all countries than any other disease. The deaths from consumption in the United States of America are not less than 100,000 annually.

It is not that I have anything specially new to offer in etiology, prophylaxis or therapeutics that I select this as a subject of discourse, but a condensed review of what is more modern and practical, with suggestions based upon personal observation and experience as it relates to the general management of the disease, may be of interest to some of the members of this Association.

It is not my purpose to examine the various theories bearing on the pathology of consumption. That organization, anatomical and physiological peculiarities and inherited constitutional predisposition, are factors in favoring the development of tuberculosis, is evident beyond question. The dyscrasia of the scrofulous diathesis, inherited or acquired, with tendency to cheesy deposits, fits a soil for the growth of bacteria. In deference to popular opinion, we accept the teaching of Koch and other bacteriologists, that tuberculosis is the result of the life and growth of a microörganism in a soil favorable to its development. It is not proven, however, that phthisis pulmonalis is always tuberculosis. Clinical and pathological investigation seem to show that phthisis pulmonalis is sometimes tuberculous, and sometimes non-tuberculous.

I think most physicians who have had long clinical experience have, from time to time, observed cases of good family and personal history, without predisposition inherited or acquired to scrofulous or tuberculous disease, come suddenly down, with cause apparent, from broncho- or croupous pneumonia, and pass rapidly into consolidation, caseation, disintegration and formation of cavities, general emaciation, progressive debility and death. Then we have the more chronic fibroid phthisis, the prime cause sometimes being from inflammatory pneumonic consolidation, and at other times from the daily inhalation of irritating particles of matter, metallic or earthy. This cause of phthisis has been productive of fearful mortality in certain employments.

While it is shown that numerous bacilli are present in the forms of phthisis which appear to have a specific cause independent of true tubercle, it is not proven that the bacilli found are the tubercle bacilli of Koch. Drs. Gibbes and Shurly, who have been doing good bacteriological work, tested the matter by feeding several guinea pigs with the sputum filled with bacilli from a case diagnosed as phthisis during life, but which an autopsy showed to have been a case of broncho-pneumonia, with disintegration of, and large cavities in lungs. The guinea pigs inoculated with matter swarming with bacteria, suffered from abscesses at point of inoculation, but none suffered from tubeculosis.

We are not yet ready to accept the doctrine of the positive minds who have attempted to settle the question for all.

Germain Sée says: "The unity of phthisis comprises all acute and chronic manifestations. There exists no dualism between tubercle and caseous pneumonia; no distinction between tuberculous phthisis and inflammatory phthisis." We believe that this is still an open question.

If we grant that all pulmonary tuberculosis is the result of the action of the bacillus of Koch upon anatomical structure rendered vulnerable by reason of inherited tendency, the scrofulous diathesis, caseous pneumonia with cheesy deposits, lessened vitality with enfeebled circulation and respiration, we shall feel the importance of carefully studying preventive measures. Prophylaxis is all-important.

If we accept the teaching of Virchow and Niemeyer, that caseous pneumonia and miliary tuberculosis are distinctive diseases, and remember the

great liability to tuberculosis in the metamorphoses of tissue from caseous pneumonia, our course of action will be little influenced by the technical question.

Whatever the pathogenesis of tuberculosis may be, it is evident that the strumous diathesis is frequently the predisposing cause. The relation of the two conditions is too evident to be questioned, and as struma manifests itself, many times, in the earlier periods of life, and is often due to faulty dietetic and hygienic management, we cannot too much feel the vital importance of correcting a condition which warns of approaching danger; for when the specific microörganisms enter the blood, the corpuscles or leucocytes are destroyed in the unequal warfare of such enfeebled constitutional conditions.

Noxious microörganisms may, and do, enter the body without producing disease. Man is continually exposed to infection by the bacillus tuberculosis. Heller, from microscopical preparations, estimates that in a single expectoration, on an average, 3,000,000 bacilli are discharged. Sputa, swarming wiih bacteria, is deposited on walks, floors of cars, boats, school-rooms and public halls. Such sputa soon dries, forms a floating dust full of poisonous microbes to which all are exposed, but only a few of the many are susceptible to their influence. Microbes, when introduced into the system, may or may not result in structural change or disease; the soil may be favorable or unfavorable. It is not yet determined what the chemical conditions of the solids and fluids of the body are in, when the tuberculous cachexia is developed. The child may inherit the diathesis or predisposition to susceptibility to tubercular disease; yet, under most favorable environment, never contract tuberculosis. Cancer and syphilis are transmitted from parent to child. Children are born with these diseases well developed, but there is little evidence that tuberculosis is inherited—the diathesis is inherited, not the specific disease.

We do not fully understand what the condition of the system is, which we call the tubercular cachexia. It is probably something more than debility, lowered vitality, or anatomical defect, but a peculiar change in the fluids or secretions of the body which favors the development and destructive work of the tubercle bacillus when it finds entrance into the system. It has been observed in laboratory experiments that certain conditions are essential in cultivating bacteria.

Pasteur relates that when he used agar-agar with 4 per cent. of glycerine as a culture medium, the tubercular bacilli developed rapidly, but when he added 8 per cent. instead of 4 per cent of glycerine to the medium, the growth of germs ceased. Then may we not hope that, in the progress of scientific investigation and experiment, the definite cause of susceptibility to tuberculosis may be made out, and means devised to destroy such susceptibility, and to render the tissues of the body unfit for the life and growth of these microörganisms?

It is probable that tuberculosis is sometimes acquired from the flesh and milk of tuberculous animals. The weight of opinion seems to favor this belief. It is the duty of physicians, individually and collectively, to influence, so far as possible, the Department of State Medicine, to create and enforce strict regulations against the spread of tuberculosis, so far as it can be done. I will not particularize how this should be done. The measures to be taken are important and varied, and suggest themselves to the physician and sanitarian.

Our duty as physicians, is the important one of guarding and guiding, so far as we can, the child, the youth and the man, against inherited predisposition to phthisis, as well as to correct, so far as possible, constitutional defects, and conditions of health leading to a susceptibility of danger almost ever-present. It becomes us to inquire what are the conditions which precede the infection, and the causes which produce the condition.

It is not my purpose to examine the various theories and alleged causes which precede tuberculosis, such as abnormalities of organization with faulty development of chest and lungs, and lack of anatomical and physiological balance in the vital organs, but to causes which are susceptible to influence by hygienic, dietetic and medicinal means.

The child and the youth with low vital force, with cardiac power below the average normal, with relatively small volume of lung and feeble respiratory system, will necessarily suffer from adynamic catarrhs, glandular congestions and inflammations, defective assimilation and nutrition, and this condition strongly predisposes to phthisis. The importance of nutrition as a preventive of consumption cannot be exaggerated; but with faulty organization and feeble respiratory function, how can good nutrition be maintained?

Physical training for the purpose of developing the chest-walls and respiratory muscles, enlarging the volume of the lungs, thereby stimulating and developing the circulation of blood throughout the system, blood which has been more completely arterialized in the lungs, will do more than anything else to favor digestion, assimilation and nutrition. Training, systematically and perseveringly practiced, will often change the flat, narrow-chested, poorly nourished, feeble youth into the large-chested, ruddy, vigorous man.

The physiological-therapeutical effects of increased chest development with lung expansion and volume, thereby increasing the activity of intra-pulmonary circulation and oxidizing a larger number of blood corpuscles, renders active the nutrition of pulmonary tissue—not alone of pulmonary tissue, but a general tonic effect is pro-

duced upon the nervous system; digestion and cellular nutrition are improved; the vital power is raised, and alimentation, the most important element in the prevention and cure of phthisis, is increased.

All observers know that faulty nutrition and wasting usually precede phthisis. Dr. Horace Dobell, in his work on the "True First Stage of Consumption," gives expression to the belief that the wasting or inanition preceding tuberculosis should be considered as belonging to the first stage of the disease.

Next in importance to nutrition is vigorous circulation of blood, pure air and sunlight.

It was an interesting and instructive experiment made by a physician a little time ago—I cannot give his name or the date of the article—showing the influence of favorable conditions in preventing the development of tuberculosis. He inoculated, I think it was two dozen rabbits with the tubercle bacillus. One-half the number were confined in pens with not good chance for sunlight nor active exercise, nor with supply of food exactly suited to their wants. All died from tubercular disease. The other half were turned into a field, favored with fresh green grass, strong light, and opportunity for the freest exercise, with the result of only one falling a victim to tuberculosis; all the others remained healthy, notwithstanding the true tubercle bacillus had been introduced into their bodies. We should not forget this lesson, for it is in harmony with what has so often been observed in man. The vigorous and well nourished, with favorable environment, rarely fall victims to tuberculosis from infection when closely exposed, sometimes for years. Then let us remember that preventive measures must be in the keeping of the general health above the grade of susceptibility to the microbic influence; keep the soil unfavorable to the development and growth of bacilli.

The scope of this paper will not allow me to attempt to note all or many of the various dietetic and hygienic measures to be observed as contributing to the raising of the standard of health and creating an immunity from the disease.

Climatic influences are efficient aids in prophylaxis of phthisis. When, from hereditary predisposition, faulty anatomical and physiological condition, the thoracic cavity small, and respiratory power feeble, a change of climate should be made from the lower sea level to high altitudes.

An elevated, cool, dry region should be selected for such cases. In high altitudes, respiratory activity is much increased, and portions of the lung tissue little used on low levels, are brought into activity. Both children and adults who live in high mountainous regions have proportionately larger chests and lungs than those who live in low altitudes; this has been shown from repeated observation. Dr. Francis, of the Bengal Army, states, after extended observation, that the lungs are smaller in Europeans in India than the European standard. The lesson from this is practical and should be kept in mind. Low temperature in high altitudes, with dry atmosphere, is most favorable. Cold stimulates to more active exercise, with increased respiration and blood circulation. The appetite for fatty, nitrogenous food is increased, foods specially adapted to the prevention as well as to the arrest of consumption. The spores of tubercular bacteria are tenacious of life, resist almost all influences for their destruction, maintain life for hours in water at the boiling point. Extreme cold and perfect dryness are without influence, then it cannot be claimed that high altitude has germicidal influence, but immunity, if it comes, is from improved physiological conditions.

Dryness and purity of the air are important, perhaps the most important, factors in prophylaxis. Air tested in the higher mountains of Switzerland showed no bacteria, while the same volume of air in Paris contained 7,000.

The atmosphere of high elevations is both drier and purer than that of low levels, and when free from microbes, it must greatly favor prophylaxis, and efficiently aid in the recovery from incipient phthisis. The air by the sea side, or in the valleys when sparsely settled, may be as pure and as clear, may be as favorable to the consumptive in the advanced stage of the disease as the rarefied air of high altitudes, though it is probable that the dry, rarefied air of the mountains is inimical, in some degree, to the development and growth of microörganisms.

Altitude in advanced consumption often acts unfavorably, particularly as it relates to the congestive, the hæmoptoic, and the irritable conditions.

We have been too much inclined to send all cases of confirmed phthisis to certain localities according to the prevailing fashion, without carefully scrutinizing every condition likely to be influenced by denser or rarefied air, by temperature, by physical comfort and mental and emotional happiness.

It is all-important that the consumptive shall live an outdoor life, and the climate and conditions of the locality must be such that a life much in the open air can be enjoyed. While altitude has an important influence, the most recent study of the subject seems to show that the mortality from pulmonary phthisis is not exactly graded by elevation, though largely influenced by it.

Dr. Schroeter, carefully studying the exact official statistics of Switzerland bearing upon the mortality of consumption for eleven years, states: "The annual mean of deaths caused by pulmonary tuberculosis is 2.31 to 1,000 living inhabitants." In an altitude of 200 to 400 metres, there were 112 deaths from tuberculosis in 1,000;

from 400 to 700 metres, 105 deaths; from 700 to 900 metres, 106 deaths; from 900 to 1,200 metres, 92 deaths; above 1,200 metres, 71 deaths. The death-rate in great altitudes falls low, 71 in 1,000; but there are other influences than altitude of which we should not lose sight. Density of population, and industrial occupations indoors, greatly increase mortality. The higher elevations are more sparsely settled, and the people live an active outdoor life; this, perhaps, in itself would account largely for the difference in the rate of mortality in different altitudes.

The contagiousness of tuberculosis is now so well established, and the more common method of infection made so apparent from a careful study of the subject, that it requires little argument to sustain the statistical facts bearing on the question of prophylaxis, and as the methods of prophylaxis are the methods for the arrest of the disease in its early stage, they can not be too carefully studied.

Cornet, whose investigations have been extensive, and apparently carefully and scientifically made, concludes, that tuberculous consumption is very largely communicable by dried sputum, in the form of dust floating in the air, and taken into the air passages by inhalation. He accounts for the greater prevalence of pulmonary tuberculosis over other forms of the disease in this way, and questions whether the lungs have any especial predilection for tubercular infection.

Remembering how tubercular bacilli are most likely to gain access to the body, we should ever keep in mind the importance of avoiding the ordinary sources of danger.

Dr. Bowditch, of Boston, more than thirty years ago, in studying the predisposing and, as he believed, the exciting causes of consumption, showed clearly that the most common predisposing cause as it relates to climate and locality, is low temperature and humidity, with soil saturation; the most marked predisposing and exciting causes, other than cold and dampness, bad air from overcrowding and faulty nutrition. All subsequent study has confirmed the wisdom of this earlier teaching.

In the knowledge of the contagiousness of tuberculosis we more clearly understand that density of population and industrial occupations so largely increase mortality from phthisis. Then it would seem vitally important in the management of consumption, particularly in its earlier stage, when any hope exists for arresting its progress or effecting its cure, to radically change, so far as possible, all unfavorable environments so as it relates to climate, to habits of life and sanitary influences. Individuals living near the sea level should change to mountain regions and live an active out-door life if strength will permit. A larger portion of cases of advanced phthisis will do better in high altitudes, with cold, clear, dry atmosphere than in warmer lower levels; but there are many exceptions to this rule.

The high, cold mountain region of winter cannot be favorable to the nervous, sensitive man or woman, who has led a life largely in doors, debilitated from disease. In those suffering from cardiac weakness, functional or organic, and of those of hæmorrhagic diathesis, such winter climate should be avoided.

In advanced phthisis with high and marked change in pyrexia, and much destruction of lung tissue, and in laryngeal phthisis, as well as in the old and the very young, a milder climate in winter must be advised.

Cases specially unfavorably influenced by the cold of high altitudes are those of defective heart power and specially sensitive to cold, and not of sufficient vitality to take active exercise out of doors; such cases are not likely to do well anywhere, but they are more comfortable, and perhaps live as long or longer in a warmer, denser atmosphere, particularly as it relates to the colder seasons. Too much stress cannot be put upon the importance of a life out of doors. I have repeatedly seen the most remarkable recoveries in unpromising cases from a life on the road by horseback or carriage.

A large proportion of cases of phthisis in the adult male feel the stern necessity of doing something for their support as long as it is possible for them to do so. Persuade the worker indoors to lead the life of a country peddler, or to go to the country, buy produce to ship to market, or do anything which will contribute to his support and keep the mind employed, and give him pure air and strong sunlight. Such a life, with frequent change in diet, gives appetite for better food and greatly favors digestion and nutrition. The skin grows brown and the blood redder, the mind happier in the sense of self-support, and hope and courage grow accordingly. The law of necessity often favors recovery. I have seen more cases do well when leading such a life for a livelihood than I have seen where fortune allowed a life of luxurious invalidism. It is folly, worse than folly to advise the sufferer to go to a popular resort for the consumptive when he has not, and cannot obtain the means for his support. It is cruel to allow him to feel that his life depends upon what he cannot have. It is not only important that respiration shall be carried on in free pure air all day, but all night as well; the day exposure favors freedom of air circulation at night.

It is not my purpose in this brief address to say much of the general management of phthisis, or to collate what has been said by master minds regarding it, but only to emphasize what seems to me most important.

In therapeutics we have made little advancement in the last thirty years, though pharmacy

has given us tonic combinations like the compound hypophosphites, more elegant and less objectionable to the taste and the stomach than the remedies and mixtures of earlier times. Arsenic is now more used than formerly and is an important aid in increasing assimilation and nutrition when judiciously used. Cod liver oil and fatty foods justly hold full favor when they can be assimilated. Medicinal inhalations, after much trial, have proved of little value

Each case is a study in itself and treatment of individual cases must often widely differ. We have no specifics, and bearing in mind scientific experiment as it relates to the destruction of bacilli outside the body, we can dismiss as useless microbicidal treatment. All effort in that direction has proved futile and is more than likely to in the future.

Progress has been made in dietetics. The importance given to food more largely animal, and the methods of its preparation, like depriving beef wholly of its water and reducing the same to a powder so that it can be taken freely when meat will not be eaten, is a step in advance.

Predigested beef and milk and pancreatic preparations of fatty foods, so essential in wasting disease, greatly aid nutrition when digestion is impaired.

It is a noteworthy fact that tuberculosis is seldom found in carnivora living in their natural state; though wild beasts confined in cages and fed upon the flesh of domestic animals liable to be tuberculous contract the disease. Herbivorous animals are easily inoculated with the tubercle bacillus. Reasoning from analogy, we should expect to see less tuberculosis in classes living principally upon animal food, and this holds true.

In Iceland and the Faroe Islands, where the inhabitants live almost exclusively upon animal diet, consumption is almost unknown. Experience, I think, has shown that consumptives who can live largely upon animal food, meats, animal oils and fats, milk and eggs, do best. In the advanced stage of phthisis with high pyrexia, lessened volume of lung from destruction of tissue interfering with oxidization of heavy nitrogenous food, a simple diet of milk, soups, kumyss, malt extract, glycerine, etc., is indicated.

The dietetic management of phthisis is more important than the therapeutic, and should receive more careful supervision from the physician; he should supervise the feeding, the methods of nutrition, as fully as the medicinal treatment, and not leave the more important to the badly educated appetite of the patient, nor to the ignorance of friends and nurses. Feeding must be prescribed and nutrition enforced. A paper on "Food in the Treatment of Pulmonary Consumption," by Dr. Solis-Cohen, of Philadelphia, published in THE JOURNAL, February 8, 1889, is full of pertinent suggestions, clearly and forcibly stated.

Jaccoud's teaching, than which little is better, as it relates to therapeutical management, should be studied by the inexperienced practitioner, particularly the advice to avoid the use of cough syrups, opiates and palliatives, which lessen appetite, impair digestion and nutrition. His earnest recommendation to use persistent counter-irritation over diseased parts, to lessen cough instead of giving anodyne cough mixtures, is to be commended.

Something can be done to relieve harrassing cough and not disturb nutrition by the inhalation from respirators charged with volatile anæsthetic and antiseptic agents, like creosote, iodized carbolic acid, bromine, menthol and camphor mixtures.

There is diversity of opinion as to the use of alcoholic drinks in phthisis. Sometimes they are indicated and are efficient in creating appetite and promoting digestion and nutrition. Many will take a glass of good ale or porter with real relish and marked benefit. Others, females in particular, can take whisky in milk, or good, sound red wine at times with good effect, while in other cases stimulants are contraindicated; the appetite is lessened and digestion impaired from their use.

It will not be profitable to review what has been written relative to the method of treating tuberculosis by Prof. Koch. The literature upon the subject is now voluminous, but most of it is of little value. Sufficient time has not elapsed to determine whether or not it will be the method of the future for the treatment of pulmonary tuberculosis.

The later reports from the more competent experimenters are not specially promising.

If the creating of the so called lymph is so difficult, and its use so dangerous that it cannot be entrusted to scientific physicians of all countries, it will be a long time before the value of the discovery will be determined.

It is now six months since the announcement of an important discovery was made, and why should so much secrecy surround it? We cannot believe, as has been asserted, that it is for purposes of money-making by a great and progressive government, or that scientific physicians of world-wide reputation would join government officials in financial speculation in material only used in the relieving of physical and mental anguish, and in the saving of human life.

It is important that great care should be taken to have the matter tested by careful, competent men, but the production of the material and its use can be safely entrusted to other than German physicians.

In the giving out of the lymph for experimental purposes, the supply being limited, it was properly restricted to hospital use. The dishonest acquisition and use of it for personal advertisement in public print cannot be too severely con-

demned. No physician with sufficient self respect to regard the good opinion of the profession at large will allow himself to be advertised for personal gain in such a way.

The advertising physician is found in the hospital as well as in private practice, and "some of them are making good and ingenious use of the popular interest in the subject to bring their names into daily notice and prominence." Such practice, whenever it occurs, should be frowned upon.

ORIGINAL ARTICLES.

AN ANALYSIS OF THE STATISTICS OF FORTY-ONE THOUSAND FIVE HUNDRED CASES OF EPIDEMIC INFLUENZA.

Read before the American Academy of Medicine, Philadelphia, December 4, 1890.

BY BENJAMIN LEE, A.M., M.D., PH.D.,
SECRETARY OF THE STATE BOARD OF HEALTH OF PENNSYLVANIA.

It is not difficult to understand why, in the extreme south-eastern portion of Europe, doubts should have been entertained as to the diagnosis of the disease, which during the past year has not only overspread that continent, but crossing the ocean, has swept over this country so generally and attacked the population so universally that we are justified in calling it a *pandemic.*

It is evidently due to the fact that one of the prominent symptoms, which is, however, by no means an essential symptom, namely: coughing and sneezing, indicating catarrh of the air passages, has been mistaken in the minds of the people, and to some extent also of the medical profession, for the disease itself. To such an extent is this true, that one medical author of considerable reputation has designated it *Epidemic Acute Bronchitis.*

The first intimation which we had of its presence in Europe was that all St. Petersburg was coughing and sneezing. And so, for many weeks, almost the only references to the spread of the disease on that continent contained allusions, usually of a jocular character, to this peculiar feature of a certain proportion of the cases. People appeared to look forward to its appearance on this side the ocean as an experience, which, on the whole, would constitute a mild amusement, rather than an occasion of suffering, distress, terror and death. A very few weeks, however, sufficed to convince both the public and the profession that influenza meant a good deal more than a bad cold in the head.

Discovering this fact, and observing the serious involvement of the nervous system in a large percentage of the cases, the inquiry suggested itself to those who were looking for nothing more than a bronchial catarrh, "Is this influenza after all, or is it some other epidemic disease, and if some other, is it not dengue?" It is true that this misconception prevailed to a much greater extent in Europe than here, and especially was this true of the extreme East, Turkey, Greece and Austria. It may not be out of place, however, to outline the distinctive features of the two affections, not so much to enable the most of us who are present to make the diagnosis in our practice, since dengue is almost exclusively confined to hot countries, but in order that, hearing of the prevalence in Europe or Asia of an epidemic disease having a similarity to either affection, we may be able to determine its character in our own minds, and hence, the necessity for expecting its advent in this country and for forewarning the people,—or the absence of any such necessity. Certainly if our health authorities had possessed the knowledge of the character of the disease, and its rate of progression geographically, in the Autumn of 1889, which they now possess, they would have been enabled to issue—and it would have been their duty to issue—precautionary circulars, notifying the people that, at about such a time, it might be expected that from one-fourth to one-sixth of the population would be so prostrated, that they would be more or less incapacitated from attention to business, and that it would be the part of wisdom for those who found themselves attacked with the disease to give up work at once and secure medical advice. People could then have arranged their affairs in advance to meet the emergency, and many lives of those who kept at business after they ought to have been in bed, or returned to business when they ought to have stayed in bed, might have been saved.

The first point of distinction that we may make is in regard to the mode of extension of the two affections. Influenza, as we have had recent demonstration, spreads like a flood, inundating whole sections in an hour, while dengue works along gradually, establishing centres of infection here and there, enabling its course to be easily traced. In their sudden onset, intense headache, pain in the back and limbs and excessive lassitude they have much in common, but, while the fever in dengue is invariably of a high grade, in influenza it is often slight or absent altogether. The catarrhal and pneumonitic complications of influenza, the dyspnœa, the feeble piping voice, are very rare in dengue, while on the other hand, the latter is characterized by violent and persistent gastric disturbances.

An erythematous eruption followed by desquamation, beginning in the face and descending, is rarely absent in dengue, and as rarely seen in influenza. Dengue very rarely terminates fatally, influenza, as we know to our cost, often does.

While, therefore, there are points of similarity between the two affections, especially in regard to their nervous phenomena, the distinctions are sufficiently marked to prevent any misconception, when large numbers of cases are under consideration.

To refer now to the history of the disease in our own country:—sporadic cases appear in our tables during the month of November. One accurate observer in Philadelphia reports a case in July. Without discrediting his diagnosis we can scarcely consider this case as due to the epidemic influence. What we are accustomed to call influenza colds, we may meet with at any time, and we are all familiar with circumscribed epidemics of influenza of a mild type. Other physicians report cases probably to be classed in the same category in September and October. About the tenth of December it began to exist epidemically on our seaboard. It was prevailing sufficiently to attract general attention in Philadelphia, by the 20th of that month. The disease began to appear as an acknowledged factor in the mortality tables of the city on the 4th day of January, when one death is recorded from the disease. An increase in the number of deaths from inflammation of the lungs, however, from thirty-three in the week previous to seventy-one in the first week in January, sufficiently indicates that the epidemic had become fairly seated. It spread with a rapidity which is scarcely conceivable, and gained in intensity as the numbers of its victims increased. By the 23d of December, it was estimated that there were 2,000 cases in the city. On the 9th of January, 6,000 of the pupils of the public schools were reported as prostrated with the disease. The number of deaths increased the first week in January, from 404 in the week previous, to 492. In two weeks it reached the startling figure of 770, more than twice as great as the mortality of the corresponding week of the year 1888. The over-worked physicians were prostrated both by fatigue and by the disease itself, and many succumbed finally.

Business was now almost at a standstill. In several instances places of business or manufacture were compelled to close for want of hands. Whole families were confined to the bed at once, so that neighbors were obliged to provide them with food and nursing care. This week, ending January 18, marked the high tide of the pestilence in Philadelphia so far as mortality was concerned, the city death-rate having fallen to its norm by the end of February. In the meantime the epidemic influence had spread like wildfire, literally "on the wings of the wind" throughout the entire State. On the 27th of December the disease was rife in Lancaster, and genuine cases had appeared in Pittsburgh on the extreme western border, and Wilkesbarre on the northern border of the State.

It is probable that not a single individual entirely escaped its pernicious effects. Its manifestations were so various, affecting in one the bronchial tubes, in another the nervous system, now the brain and now the bowels, here peritonitis and there pneumonia, that it was a long time, comparatively, before physicians, even, recognized it in its protean forms. It is scarcely conceivable that a disease which spreads with such astonishing rapidity, goes through the process of re-development in each person infected, and is only communicated from person to person or by infected articles. And yet this theory has been maintained by a few authorities who claim that it is always more prevalent along lines of travel, and that it did not progress more rapidly than modern means of communication would enable it to do.

Whatever theory we may adopt of its means of propagation, it was felt by the writer that an affection so fatal in its results and so widespread in its domain possessed an importance which entitled it to especial study. He therefore prepared the following circular, cyclostyle copies of which, to the number of more than seven thousand were distributed to the members of the medical profession throughout the State of Pennsylvania:

Dear Doctor: I am desirous to obtain reliable statistics in regard to the recent pandemic of influenza as observed in this State. Will you, therefore, kindly furnish the information called for below, by filling up the blanks from the data in your visiting list or note book and returning the sheet to me as early as practicable?

Yours very respectfully,

(Signed) BENJAMIN LEE, M.D.,
Superintendent of Vital Statistics.

Residence———County———Date of first case———Number of cases———Adults———Children———Predominant type (nervous)———(Catarrhal)———(Inflammatory)———Number of deaths (Directly caused)———(Indirectly caused)———.

Immediate cause of death: Bronchitis, Adults———Children——; Pneumonia, Adults——Children——; Phthisis, Adults———Children———; Nervous affections, Adults———Children———.

Up to the 1st of May, 4,500 of these letters had been sent out.

The following is an analysis of the results obtained at that date:

Number of physicians reporting . .	265
Number of cases	37,275
Adults	26,302
Children	10,973
Number of cases nervous	6,913
Number of cases catarrhal	16,434
Number of cases inflammatory . .	5,829
No. of deaths directly caused, 56 } No. of deaths indirectly caused, 205 }	261
Immediate cause of death, bronchitis,	8
" " " pneumonia,	117
" " " phthisis. .	42
" " " nervous. .	21

Supposing, which there is no reason to doubt, that the 265 physicians who replied, represent a fair average of the practitioners of the State, this would give us 1,120,000 persons as having been

sufficiently ill with the disease to demand medical aid or come beneath the observation of a medical man, and 7,879 deaths directly or indirectly caused by the epidemic influence in the State of Pennsylvania alone. We know that there were many who suffered mild attacks who never sought advice, and many more whom physicians, in their excessive haste, failed to enter on their visiting lists although they may have prescribed for them.

In fact this is exactly the return that was made in some instances:

"Treated an immense number of cases but kept no record."

Nearly one-half of the cases reported were in the city of Philadelphia As the Philadelphia physicians reporting constituted only about one-third of the whole number, the disease must therefore have been more prevalent in large cities than in the country. To be exact, the average of cases to each physician reporting was 140; while the average to each Philadelphia physician reporting, was 193.

The disease seems to have been especially prevalent in mining towns. Two physicians in Shamokin, a place of about 12,000 inhabitants, report 950 cases between them. In Greensburg, a place of about 6,000 inhabitants, two physicians report 737 cases. In the little village of Portage, Cambria County, numbering 650 inhabitants, one physician reports 400 cases. Ill-fated Plymouth suffered seriously as did the most of the other mining towns and villages of Luzerne County. Scranton was also severely visited.

One curious fact developed by the investigation is that the disease was observed quite as early in the extreme western portion of the State as in Philadelphia on the eastern border. Indeed more observers in proportion to the population report having observed cases in November in Allegheny County than in Philadelphia County: as though a disease bearing air current had passed over the eastern border at a great altitude and dipped down in the western portion of the State.

Of the 265 physicians reporting 206 made the distinction as to the predominant type of the disease. While it is to be regretted that all did not, still this number, representing more than 29,000 cases, is ample for purposes of deduction.

Nearly 7,000 of these are recorded as belonging to the nervous type. This is very nearly 25 per cent, and does not, of course, preclude the presence of nervous symptoms in a large proportion of those set down as catarrhal or inflammatory. And this takes us back to the point from which we started, namely the marked predominance of the nervous element and the protean character of the manifestations in this singular affection. How shall we account for the production of such varied morbid phenomena by a single morbific agent.

Some writers, among whom may be mentioned Dr. Dixon, of the University of Pennsylvania, attempt to explain it by saying that the disease lowered the vitality of the cells of the various tissues so that they were no longer able to resist the onslaughts of the microbes of the various diseases, and that any that happened to be present found an entrance and developed their peculiar affection. Others, as Dr. Baker, Secretary of the State Board of Health of Michigan, consider that the atmospheric condition affected the lining membrane of the air passages in such a way as to make it easy for the ever present germs to find an entrance into the blood; and, as in the first mentioned theory, that each produced its characteristic chain of symptoms

One great obstacle to the acceptance of these theories is the fact, that they require the existence of a great number of microbes of which we have no knowledge.

To the writer it seems more rational to suppose that the morbific influence, whether germ, microbe or occult meteorological departure from the normal condition, spent itself directly upon the nervous system, and more particularly on the vegetative portion of that system, or to particularize, still further, upon the pneumogastric nerve and its associated ganglia with partial implication of the spinal cord. Nearly all phenomena which distinguish influenza from other similar affections can be readily accounted for by this theory; the excessive nervous prostration, so entirely out of proportion to the catarrhal disturbance, the emotional depression, causing the victim to weep incessantly without consciousness of any reason for so doing, the sense of constriction about the larynx, the strident cough, piping voice and occasional aphonia, the sudden congestions of the lungs, the pain and stiffness in the dorsal muscles, especially along the nucha, the gastric and intestinal disturbances, the intense headache, and transient manias, all can be accounted for by the supposition that the great balance wheel of organic life has become deranged—and on no other theory so simply.

The fact that all the remedies which were found most beneficial in the treatment of this affection are nervines, such as phenacetine, morphia and nux vomica may also be adduced as strongly confirmatory of this theory.

1532 Pine St., Philadelphia.

A VERDICT of $100 damages has been given against a London chemist who supplied ammonia when sal volatile was asked for. The plaintiff, an actress, was said to have been prevented from following her engagements for nine days as a result of the mistake.

NOTE ON THE BATH TREATMENT OF TYPHOID FEVER.

BY SIMON BARUCH, M.D.,
OF NEW YORK.
PHYSICIAN TO THE MANHATTAN GENERAL HOSPITAL AND NEW YORK JUVENILE ASYLUM.

In the article "Has progress been made in the Medicinal Treatment of Typhoid Fever?"[1] Dr. T. J. Happel, after reviewing the various methods of medicinal treatment, goes out of his way to attack the Brand Treatment (which certainly is not a "medicinal" treatment).

I feel called upon to say a word in defence of the bath treatment which he dismisses so summarily. "The bathing must be begun early," says the author (p. 811) in quoting the directions I gave in a review before the Academy of Medicine, "even before a diagnosis can possibly be made. I would suggest that the longer before a diagnosis can be made, the bathing is begun, the greater the per cent. *me judice*, of cures, because the greater the number of febriculæ and simple continued fever cases you are apt to have to treat."

It does not seem to have occurred to this gentleman that men like Ziemssen, Juergensen, Vogl, Brand, Tripier, and other eminent clinical teachers are as capable of making a diagnosis of febriculæ from typhoid as he is, and that they do not regard a case as typhoid unless it runs its characteristic course.

Again, this author says (p. 811): "If we wait until we are fully satisfied that we have a case of typhoid fever, we will find that Brand's method will offer no advantage over former methods of treatment." This positive dictum of the author would presuppose that he has given these methods a fair trial, which I greatly doubt, on account of the horror he expresses of the Brand method. Moreover, I deny that "its advocates must admit that it is as yet *sub judice*."

In discussing this question I have been careful not to obtrude my own personal experience, although it extends over twenty-eight years in military and civil, private and hospital, village, country and city practice, North and South. The experience of one individual is valuable only as a part of the aggregate, *unless it be very large*. Such an experience we have obtained from Vogl, the chief of the garrison hospitals of Munich. As this is only confirmatory of Brand, Ziemssen, Juergensen, Struempell and others, and as he is not the originator of the method, we may in all fairness accept his statements as positively free from bias, and incontrovertible. Vogl tells us that he was led to abandon all other treatment of typhoid fever, in favor of the cold bath, by studying the records of the institutions under his charge *for forty-seven years*. During this period every method in vogue had been applied in 8,325 cases of typhoid fever. The various types of disease are clearly pictured in his work, giving symptoms, complications and pathological changes. From venesection to nihilism, and, later, antipyretics and baths; the gamut was run as was the fashion at different times. Since 1868 the bath treatment has been used in 889 cases; alone in one station and combined with antipyretics in another, with the following results:

	Combined Treatment.	Pure Bath Treatment.
Mortality	6.7 per cent.	2.7 per cent.
Average hospital stay	40.7 days.	47.3
Per cent. complications	102	65.2
Average number diarrhœas per person per day.	1.9	0.7

The mortality under the old treatment ranged from 40.3 per cent. down to 7.6 per cent. These figures will, I trust, convince your readers that Dr. Vogl did not mistake febriculæ for typhoid fever, and as they only sustain the verdict of a large number of equally capable and honest hospital physicians, they demonstrate that the superiority of the bath treatment is not, as your author supposes, "still *sub judice*." Medical statistics are proverbially unsatisfactory, but if ever they approach exactness, these of Dr. Vogl are an instance; for here we have a military hospital, under various administrations during forty-seven years, treating exactly the same class of patients, soldiers of about the same age, previously in good health, having the same employment, the same food etc. Surely no better data for a comparative estimate of a question in medicine can be imagined. And yet the author has the temerity to tell your readers, "I enter a protest that the mortality of typhoid fever cannot be reduced to 3 per cent. by any such procedure, but that the errors in diagnosis account for the vast discrepancy!"

Upon another point I must take issue with the author when he says: "Antifebrin given in such doses as the patient is found to bear, will accomplish in one hour what is effected by the Brand system in three times that length of time." If the author had ever tried a genuine Brand bath he would have discovered several errors in this proposition, the principal one being that the effect of the bath upon the temperature and pulse is obtained, not in "three hours" after the bath, but in fifteen minutes. If the author had studied recent developments in experimental therapeutics, he would also have known that Lépine demonstrated in the Paris Congress of Therapeutics in 1888 that antipyrin and antifebrin lower the vitality of the protoplasm, that they convert the hæmoglobin and attack the cell structure and destroy the red blood corpuscles. It was generally accepted that they undermine every organic function, hence they are dangerous in a disease recovery from which depends upon their integ-

[1] In the Journal of the American Medical Association, December 6, 1890.

rity. Vinay also shows that they diminish the excretion of urea and nitrogen. That this is not mere theory is proved by the almost unanimous verdict against the use of antipyretics in typhoid fever, given by the American Association of Physicians in 1887, and in favor of the bath treatment by the Wiesbaden Congress of 1885.

I agree with the author upon one point, viz., the Brand bath requires a considerable outlay of trouble. But when we consider that it saves the involuntary soiling of beds, the muttering and wild delirium, the frequent diarrhœas, and, above all, that it saves enormously in mortality, that it abbreviates convalescence and cheers the family and friends, the latter, even in the country, will not be averse to the additional trouble for fifteen minutes every three to six hours. The water need be changed only once in twenty-four hours, unless the patient soils it. If it cannot be executed with precision, the nearest approach must be made, just as we, who have practiced in the country, were so often called upon to do.

My friend, the late Dr. Trantham, of South Carolina, once did a craniotomy with a jack knife, and did it well. In my experience, country physicians, many of whom I have in former times met in consultation, are the readiest men, most full of resources, whom I have ever met. They will not fail to invent some means by which they will nearly substitute the Brand method. If they can accomplish it, those living in towns and cities will not fail to do so. In *Gaillard's Medical Journal* for January, 1891, such methods are fully given, as I have found useful in the past. The principles of the bath should always be borne in mind. *A temperature of the water not below 65° nor above 70°, duration ten to fifteen minutes, constant friction of the surface.*

There are many points in the paper of Dr. Happel which tempt me into criticism, but I have referred only to the most salient point of his argument, which seems to be a denial of the mortality reducing value of the bath-treatment upon the ground that "errors of diagnosis account for the discrepancy." The untenability of the argument (?) is proven by Vogl's plain statement of the duration and complication of his cases, and the results.

47 E. Sixtieth st., December 11, 1890.

KOCH TREATMENT OF TUBERCULOSIS.[1]

BY SOLOMON SOLIS-COHEN, M.D.,
OF PHILADELPHIA.

In the Polyclinic evening lecture course, February 17, Professor Solomon Solis-Cohen reviewed the published records of cases treated by the method of Koch. He stated his continued disbelief in the etiological rôle ascribed by the majority of cotemporary writers to Koch's bacillus. The work of Dr. Heneage Gibbes was highly commended, and close attention asked for the facts brought out. The close association of Koch's bacillus with certain forms of the diseases called tuberculous, and its possible determining influence in the destructive outcome of the lesions, were admitted by the lecturer. But the actual disease in the preponderence of cases he found in that condition of system or cells which permits the bacillus to find pabulum in the tissues. Given this condition, the reaction between the tissues and the bacillus gives rise to some product which destroys tissue. If we produce this substance outside the body and inject it, we destroy tissue more quickly. This is what Koch's method does. The poison or poisons—ferment, toxine or whatever it or they may be—generated by the mutual reaction of the bacillus and the tissue, being dissolved in glycerine is called "Koch's remedy," and is injected. In subjects of tuberculous disease it causes the process to become more rapid. The affected tissues dying, the microbes are deprived of food and starve to death. If the lesions are external the dead tissues are cast off and temporary recovery takes place. But the condition of the remaining tissues permitting them to succumb is not cured unless this is accomplished by other means, and relapse, that is to say reinfection, may occur at any time.

When the affected tissues are not external, even if only slight lesions exist, the inflammation, ulceration and hæmorrhages produced may be fatal, as in the cases reported by Chiari, Virchow, Fraenkel and others. In other words, a case that might last months, or even years, completes its destructive course in a few days or weeks. Even in external cases in highly susceptible patients, rapid spread of the disease may result, as in Fraenkel's case of tuberculosis of the tongue. Cases have been reported also in which after the injection bacilli were found in the blood. In the meninges or the brain the local reaction is almost sure to have fatal results by compromising important structures. In the larynx occlusion from local reaction may necessitate prompt tracheotomy. In cases with extensive pulmonary cavities further destruction means immediate death. It is only fair to Koch to recall that the counter indications in cerebral, laryngeal and extensive pulmonary tuberculosis, were pointed out by him.

It is claimed that reaction occurs only in subjects already tuberculous.

Dr. Cohen doubts this. He points out that human beings may clinically be divided into three groups: 1. Those highly susceptible to tuberculosis. 2. Those moderately susceptible. 3. Those insusceptible. The first and second groups are subject to many subdivisions which need not be considered in detail in this connection, and individuals of the third group might under pecu-

[1] Abstracted for The Journal.

liarly depressing environment acquire temporary susceptibility. If Koch's virus be injected in moderate quantity in a nonsusceptible person, no harm might result. If injected in a highly susceptible person, even if he had not already acquired the disease, the injection would probably give it to him. The reaction proved not the previous presence of the disease, but the susceptibility of the patient, and possibly the acquirement of disease from the injection. Its diagnostic use is like setting fire to a house in order to find out if the house is fireproof. It might be fireproof—in which case no harm would be done—but then again, it might not. One further danger, the speaker said, had been illustrated in a case not yet reported, of which he had personal knowledge. The patient had both laryngeal and pulmonary disease, and most probably would have perished in the natural course of events, after a somewhat more prolonged illness. The point to be made, however, was independent of the actual condition of this patient. Death occurred after profuse hæmorrhage. Old and unsuspected cicatrices had broken down in the lung, and while recent lesions had been apparently favorably influenced, death had occurred from extensive destruction of the salutary work formerly accomplished by nature, unaided. This seemed to indicate that in subjects of a certain degree of susceptibility, tubercular formation might go on to fibroid change, the bacillus being unable to bring about necrosis; but by injection of the necrosis-poison the fibroid tissues, being still weaker than normal, might succumb, and a patient whom nature was curing, be slain by art.

Moderate susceptibility was proved by the existence of lupus for many years, or of certain joint lesions, or glandular lesions for many years, without fatal involvement of important organs. The fire was there but it only smouldered. The house then was partially fireproof. In these cases it might be very good practice, where it was impossible to thoroughly cut away the smouldering portions, and where they were favorably situated for this purpose, to cause them to burn out quickly and thus limit danger of further spread. Hence Dr. Cohen believed the Koch treatment justifiable in chronic lupus and chronic joint tuberculosis of long standing, without serious visceral involvement. The chronicity of the disease proved that the patient was only moderately susceptible. It might, and did, in joint cases, at least, require surgical aid to remove the débris.

In lupus or joint lesions of short standing, however, other measures should be used at first, and only after these had failed and time had proved comparative insusceptibility of viscera should the Koch remedy be used. A case recently reported of death in a girl of 17, with lupus, after one injection of two milligrams, was cited in support of this position.

Dr. Cohen said in conclusion that in incipient phthisis the remedy was not needed. Food and air, with exercise and rest appropriately alternated—in other words *nutrition*, with the aid of creosote, iodoform and a few other drugs at suitable times limited the spread of the disease and brought about recovery in all cases where recovery was possible. Those highly susceptible did not recover, but had their lives greatly prolonged. Injection of iodine or other medicaments, as recommended by Dr. Shurly, might prove to be of assistance. The speaker was now making some observations with Shurly's method. In acute miliary tuberculosis, or in chronic phthisis with large cavities, Koch himself had said that his remedy was counter-indicated.

Dr. Cohen therefore limited its use to appropriate cases of lupus and joint-disease, or other external lesions whose course and duration proved the patient to be only moderately susceptible. It had been said that the death-rate was only 1 per cent., 85 cases in 8,500, but what physician would dare to prescribe opium, arsenic, or even quinine indiscriminately, if it killed one patient out of every hundred? Furthermore, if the proportion of deaths to injections in phthisis alone were considered, it would be found to reach a far more alarming percentage. For the present, at least, he did not hesitate to declare the use of Koch's remedy in phthisis a practice full of danger.

THE CLINIC.

A CLINICAL LECTURE ON INSANITY.

Delivered at the Insane Hospital, Dunning, Ill., to the Students of the Woman's Medical College of Chicago.

BY DANIEL R. BROWER, M.D.,

PROFESSOR OF DISEASES OF THE NERVOUS SYSTEM, DIDACTIC AND CLINICAL, IN THE WOMAN'S MEDICAL COLLEGE; PROFESSOR OF MENTAL DISEASES IN RUSH MEDICAL COLLEGE; PROFESSOR OF DISEASES OF THE NERVOUS SYSTEM IN POST-GRADUATE SCHOOL, CHICAGO, ILL.

[Reported by ELIZABETH H. TROUT, M.D., Assistant to the Chair of Nervous Diseases, Woman's Medical College, Chicago.]

Case 1. Melancholia.—The delusions of melancholia, as we have told you, are of a very depressing character. This woman, you will see at a glance, is perfectly miserable. Her delusions are of the religious type, as they frequently are. All varieties of this disease have the fundamental character of melancholia, viz.: the depressed emotional state, as their essential feature.

The temperature in this case is normal, which is unusual. In acute melancholia the temperature is generally below normal.

Case 2.—Here is a case showing the characteristic position that these patients assume in the early stage. The head is bowed upon the chest, the eyes drooped, the expression thoughtful. She is apparently in deep meditation, she evidently

has some weighty matters on her mind. She never speaks. Her temperature is depressed, as is usual in these cases. After the melancholia has existed for some time, if the patient becomes excited the temperature will not be subnormal. An interesting feature of this case is, that it is the outgrowth of lactation. We have connected with the life of woman the insanity of pregnancy, of the puerperal state, and of lactation. The insanity of lactation usually manifests itself as is illustrated here. The delusions are of a depressing character. The insanity of pregnancy is usually of this type also, while that arising out of the puerperal period is generally maniacal.

The depressing influences surrounding the pregnant state, and the physical exhaustion resulting from lactation, have doubtless a great deal to do with these cases assuming this type of insanity. Women in these conditions suffer from insomnia, impaired appetite, disturbances of digestion, etc. There are many important etiological factors. The prognosis is less favorable than that of mania.

Cases 3 and 4. Mania.—Here are two cases of puerperal insanity, usually so called if it occurs during the first six weeks of parturition. It is a form of mania. Note the difference in expression and attitude from the cases we showed you a moment ago. The head here is held up; see the constant play of the facial muscles and the activity of the entire body. The delusions of these cases are of the happier type: expansive delusions. The circulation is quickened, the pulse is 120. Note the contrast to the absolute rest and quiet of the cases of melancholia just shown you. The insanity of the puerperal period is the most fortunate form of insanity to encounter. The proportion of recoveries is about 80 per cent. They are to be treated by such remedies as will control the violence of their activities, and depress their nerve centres, and by nutrients and eliminants. These patients must have a large amount of food and rest. Eight or nine hours of the twenty-four should be spent in sleep, and to produce this, some form of narcotic should be given: chloral or sulfonal. The latter acts well in many cases. You must give some sleep-producing agent that will accomplish the result without too much depression of the circulation. Sulfonal is not commonly a cardiac depressant, and does not usually interfere with the nutritive processes. The deodorized tincture of opium is often beneficial. Preparations of morphia are sometimes very valuable in these cases. Some of the opiates will produce sleep better than such depressants as bromides or chloral. Tonics are to be administered judiciously: preparations of malt, iron, strychnia, quinine and the hypophosphites. The food should be of a very nutritious character and easily digested—milk, eggs, beef extract, etc. You must bear in mind the fact that the exciting cause may be in the uterus or its appendages; as subinvolution or partial inversion. In fact, you should examine carefully every organ in the body and correct, if possible, any departure from the physiological standard.

In melancholia we find a sluggishness of the alimentary tract. These patients need laxatives much more than do the manias. The aloetic purgatives are the most useful here. The food also in melancholia should be easily assimilable, and if the patients refuse to eat, as they frequently do, no time should be lost in resorting to artificial feeding. The nutritive processes are very much disturbed, and to allow these patients to go without food would be very injurious. The prompt use of forced feeding, in some cases, hastens the return of the physiological habit. The medicine can be administered at the same time. The proper treatment of lithæmia and allied conditions, if present, should be prompt, and may be remedial. Patients whose temperature is subnormal should bs kept in warmer apartments than those of the sthenic type. These patients need cardiac and general stimulants also.

Case 5.—Here is a case of acute mania of three or four months' duration. The facial expression is one of pleasure. The activity of the muscles of the face and body is very great. The circulation is quickened. The delusions are of the expansive type, as with the puerperal cases.

Case 6.—This is also a case of mania. She has been in this condition a long time, she is a kleptomaniac. The tongue is coated, digestion disordered, the pulse quickened, but not to the same extent as in the case just shown you. You will also notice that the activity of the muscles is not so great.

Case 7. Chronic Melancholia.—I will call your attention in this case, to the peculiar appearance of the finger-nails. Fothergill calls it the "gouty finger-nail." It is well shown here; it consists of rough, somewhat irregular, whitish ridges, running longitudinally. You will also notice in this case the discoloration of the hands and feet, due to some error of the circulation. The hyperæmia is probably due to degeneration of the blood-vessels. These defects accompanying insanity are very interesting. They serve to teach us an important fact, viz.: that insanity is a disease of the whole organism; no person can be insane without having more or less disturbance of the whole organization. "A person who is insane is insane to his finger-ends." Such is the intimate connection between the brain and the periphery, that it is impossible to have an amount of disturbance of the brain sufficient to produce insanity without great physical or constitutional disturbance, and more or less want of nutrition all over the body. To find a person of insane mind with a perfectly healthy organism would be an impossibility. The "Fothergill finger-nails" show disturbed nutrition and a defective circulation. The temperature is subnormal, and her de-

lusions are of the most depressing character. The peculiarity of the mental disturbance in this case is that the woman does not talk at all. It is a case of chronic melancholia of many years' standing. There is considerable malformation of the head here, excess of development of the left side compared with the right. These defects are very common, especially in monomania. Take a picture of first one side of the head and then the other, and you have really pictures of two individuals.

Cases 8 and 9.—Here are two excellent cases of chronic melancholia. You see that they assume the characteristic attitude: the head bowed upon the chest, the hands resting upon the knees. They also show the disordered circulation, the peculiar disturbance so common in these cases; a congestion of the capillary system. I presume that for a pathological basis in many of these cases there is a similar condition of malnutrition of the brain, such as you see so well marked in the hands of these men.

Melancholia remains as such for many years. All cases both of mania and melancholia are tending either towards recovery or towards that other form of insanity to which we called your attention a few days ago, dementia. Both these cases are nearing the latter type. This condition is recognized by the loss of memory, the untidy habits, etc. These patients become more and more slovenly until finally they cease to pay any attention to their personal appearance, and become exceedingly negligent and dirty in their habits. During the active stage they are simply depressed, they have the same mental capacity that they ever had, only they are under the influence of their delusions. What is simply functional in the beginning becomes organic. The brain cells are slowly destroyed, they atrophy, and these people literally lose their minds and become demented. This we call secondary or terminal dementia. These cases are all more or less hopeful until the memory begins to fail; when this occurs and dementia is established there is no possibility of recovery.

Case 10. Monomania.—Here is a case with a fixed and limited delusion. This woman is under the impression that she is engaged and is to be married. She prepared her trousseau. There is no rational basis for her delusion. The man she expected to marry was ignorant of the whole affair. Along with this form of insanity that takes the neurotic character, there are certain physical defects. These cases have been recently termed "paranoias." They come into the world physically defective, but their mental derangement is not usually manifest until puberty. The mind is enfeebled, but they are not imbeciles; they may possess considerable influence. Their delusions are systematized and are often of the exalted type, in the way of pride or grandeur. In this case there is no physical defect apparent, and outside of this one delusion, she seems to be all right. These cases form a large percentage of insanities. It is an embarrassing class, as it is difficult to apply the tests of insane delusions. You will often be perplexed as to these cases of monomania. Mahomet was one, Peter the Hermit, who led the Crusades, was probably another, Guiteau another. The man who shot at Edwin Booth was probably one also. His delusion was that Booth was his father and was neglecting him; acting upon this, his whole life was shaped at redress. He followed him about from place to place, annoying him greatly, and finally shot at him in McVicker's Theatre, in this city. Outside of this particular line of mental derangement, he seemed to be perfectly rational. He imagined he possessed great dramatic ability, and endeavored to secure an engagement with one theatre company or another. These people frequently have the power of hiding their delusions; you may study them for weeks without finding them out.

Cases 11, 12 and 13. Epileptic Insanity.—Here are three epileptic cases. Epilepsy is a disease of the brain. All epileptics are drifting towards insanity. It is a possibility with any of them, although it occurs much more frequently with the petit mal type than it does with that of grand mal. Petit mal attacks are just as serious, if not more so, than grand mal, on account of the frequency of their occurrence. A patient will have several of these attacks of petit mal in one day, thus keeping the brain in a state of commotion. Insanity that grows out of epilepsy is most perplexing. All these insane epileptics have defective inhibition. They are impulsive, liable to sudden outbursts. In the interval between their attacks they are often the most useful people in the hospital—kind and industrious. During their paroxysms they are often very dangerous. These epileptic manifestations are usually preceded and followed by a state of excitement. Irritability and epilepsy go hand in hand; almost all these cases are irritable above the average person, they are also vacillating. They are the most unsatisfactory patients the physician has to deal with. They will be under your treatment for awhile, then get discouraged, and travel from one doctor to another. They lack fixedness of purpose, are irritable always, and may be exceedingly violent during their paroxysms. This case shows well the asymmetry of the face, and also a deformity of the chest.

Case 14.—Here is an interesting case of epileptiform insanity showing discoloration of the face —"argerism." This is caused by a persistent use of the nitrate of silver. He took the drug for five or six years. In using this drug it should never be administered for more than three months at a time, and the amount given should not exceed 90 grs., 1 gr. per diem. This will produce

whatever benefit is to be derived from the drug. After a long interval you can repeat the treatment. In this case no benefit was derived from its use, nor is there any to be expected except in those cases that are stomachic in their origin.

Case 15. Hemiplegia.—This case you see has lost the power of the arm. There is some contraction of the fingers and also of the foot. There is also exaggerated patellar tendon reflex, and aphasia. She understands perfectly well what she wants to say, but she cannot say it. It is a case of amnesic aphasia; the power of speech is lost because of the loss of memory of words. Articulation is not lost. The doctor tells us that there was a blocking of the internal saphenous vein. The case may be one of embolism, but because she has lost the power of expressing her ideas she was supposed to be insane. There is no other evidence of insanity. In right-sided hemiplegia there is always some aphasia, and when the lesion is pronounced it cuts off the speech centre from the parts below. Such a condition as this might serve to impress some people with the idea of insanity. The case is of interest to us only as one of mistaken diagnosis. She is not insane, but it serves to show us the necessity of making a careful examination.

I will now call your attention to another type of insanity: *Paretic Dementia—General Paralysis of the Insane.* This disease usually occurs in the prime of life, and is much more frequent among males than females. In females the disease runs a slower and more even course; the delusions are not, as a rule, so expansive, nor the remissions so abrupt as in the male. We have two varieties: the ascending type, beginning in the spinal cord, and the descending type, beginning in the cerebrum. The average duration of the disease is about three years, although it may terminate much sooner or extend over a period of many years. All cases of paretic dementia have many symptoms in common: the peculiar thickness of speech, the inequality of the pupils and their immobility to light, the clumsy walk, and their unsystematized delusions, usually of the expansive type, of wealth or grandeur.

Case 16. Female.—This woman, you see, has the depressive form of delusion. She imagines that she has been greatly wronged. It is very uncommon to find the delusions as depressive as they are in this case, even among women. You will notice here the peculiar defect in speech. Later along this defect becomes aggravated by the increasing amnesia of the patient, causing the frequent use of the wrong consonant. A characteristic feature of the later stages is the unnecessary movements of the lips and tongue, associated with those of other muscles, upon efforts at speaking: the nostrils dilate and contract alternately, the corrugation of the occipito-frontalis muscle increases, and after all these spasmodic and exaggerated movements, the word is thrown out as though it had to force its way through some impediment. This case shows some inequality of the pupils, and has exaggerated patellar tendon reflexes, showing that the spinal cord, as well as the brain, is involved in the degeneracy.

Case 17. Male.—Here is another case of paretic dementia. This man says there is nothing the matter with him. He feels first-rate. He tells us he is worth $30,000; he is happy, satisfied with himself and his surroundings. Note the similarity in speech in this case and the preceding one. We have here, also, inequality of the pupils—contracted, in this case; they are also immobile. The delusions of this man are of the character usual in this disease: the expansive, happy type. These people simply assert their wealth, or grandeur, or whatever it may be; they do not reason about it; their delusions are all unsystematized. Compare the appearance of this man to that of the woman. The mental deterioration is just as serious in one case as the other. The man, you see, has a satisfied, happy look, while the woman is perfectly miserable.

Case 18. Male.—Here is another typical case. He says he is not so well as he expects to be, but he imagines he can jump, box and spar. He also thinks he is a graduate of Yale, and valedictorian of the class. You see he is self-satisfied and happy. Notice here the same disturbance of speech, the same pupillary phenomena, and the same exalted character of the delusions.

Case 19. Male.—This man imagines he owns all the real estate in the world, all the horses, and every stick of wood. He has the same air of satisfaction and content, and all the symptoms enumerated in the two preceding cases.

Case 20. Male.—This man tells us he is wealthy; he imagines he can sing and dance. You see, he is happy and contented. He has the unequally dilated pupils, the clumsy walk, and the same defective speech.

Case 21. Male.—Here is another wealthy (?) paretic. He owns the State of California. He has the same characteristic symptoms shown you in these other cases. The tremor of the tongue is present, in a greater or less degree, in most of these cases.

Case 22. Male.—This is a recent case.

(To patient): "How is your health?"
Patient: "Perfect, doctor—I'm first-rate.
Prof. B.: "How long have you been here?"
Patient: "Three or four weeks."
Prof. B.: "Why did you come here?"
Patient: "I ran for Senator at the election. I had no money. The boys came around for some 'stuff.' I had none, and they attacked the house and broke the windows. Some one came to protect me, and took me to the Town Hall; next day my house was set afire and burned. That disturbed me, powerful. Some of my children came down to tell me about it, and were run over by a train."
Prof. B.: "How much of a majority were you elected by?"

Patient: "I don't know, exactly. It was pretty fair."
Prof. B. (to class). "This is all a delusion."
Patient: Oh no, it is not."
Prof. B.: "Well, we may need your assistance in the Legislature."
Patient: "You shall have it, with pleasure."

During the early stage of this disease, depressive delusions may occur, as in this case. The defect in speech is noticeable in this case, and there is some inequality of the pupils.

The prognosis of this disease, while not absolutely hopeless, is bad. Treatment is of service only in the early stage. If the condition is recognized during the prodromal period, you may possibly be of some service to them. In the cerebral form, this stage presents as its most notable sign, a change of character. The heretofore careful business man becomes negligent, the kind husband and father, indifferent or irritable. The memory is early affected and, at first, relates to trifles. As this period progresses, more serious omissions and errors occur. He becomes irregular in his habits, forgets his appointments, and along with these symptoms the morals begin to totter. The patient forgets his moral obligations to himself and to his family. His walk becomes less steady and regular. The legs are thrown wider apart in order to widen the base of support. During this stage the patient may be more or less depressed. At the close of this period the depression, if it existed, disappears, and delusions of grandeur take its place, often coupled with extravagant expenditures. There is also an increase of all the physical signs. This excited condition may last a few hours, days or weeks, when a remission occurs and the patient apparently recovers. In the majority of cases, tremor of the hands, inequality of the pupils and a slight speech defect are more or less prominent during the remissions, which may last from three or four months, to years. With every exacerbation, the physical signs increase, and the mental deterioration becomes more manifest. When the disease is recognized, the patient should at once be put to rest, physically and mentally. Mild alteratives combined with tonics may be of some service. The blood supply to the brain should be regulated, by such remedies as bromides, ergot, etc. Narcotics of a non-depressing character should be used if necessary, and the diet should be carefully attended to. Nutritious and easily digested food should be freely administered. Massage and the constant galvanic current are also of great value.

SMALL-POX.—Authentic reports indicate quite a widespread existence of this disease in Texas—that is, that it has appeared at a considerable number of points throughout the State. Two cases are also reported to have been found in New York City.

MEDICAL PROGRESS.

Therapeutics and Pharmacology.

INHALATIONS OF PEROXIDE OF HYDROGEN.—GABRILOWICZ (*Nouveaux Remèdes*, 1891), has tried the inhalation of peroxide of hydrogen in a large number of cases of affections of the larynx and trachea. He begins ordinarily with a one per cent. solution which is gradually increased in strength; in tuberculosis he recommends a beginning strength of five per cent. He has employed the remedy in a large number of conditions affecting the respiratory organs, acute and chronic laryngitis, trachitis and bronchitis.

THE TREATMENT OF ADDISON'S DISEASE, WITH KOCH'S REMEDY.—DR. HERMANN LENHARTZ (*Sonderheft der Therap. Monatshefte*, January, 1891), contributes an exceedingly interesting case of this disease that was apparently cured.

The writer thinks that the most frequent change in the adrenals in Addison's disease consists of a caseous tubercular degeneration. In the 152 cases collected by Greenhow changes were confined to the supra-renals in 101, the bulk of these cases presented the typical picture of tubercular caseous degeneration. It is apparent that in any case of morbus Adisonii a localized tubercular process may be present in the adrenals, and therefore in the writer's judgment the use of Koch's lymph in these cases is at least justifiable.

The patient, 23 years of age, came from a healthy family of eight children. On December 24, was taken ill, with marked debility, loss of appetite, headache and fever (?), was confined to the bed until the 16th of January. One of the most prominent symptoms was frequent vomiting; diarrhœa was occasionally present, alternating with constipation. From the middle of January until the beginning of May the patient was comparatively well though he complained of weakness and had occasional vomiting. A Carlsbad cure was ordered, but only increased the weakness of the patient and the frequent vomiting; at this time he was in bed more or less, had daily vomiting with alarming and frequent attacks of sudden weakness. The writer saw the patient first on the 22d of October last, when he was emaciated and greatly reduced in strength. The most noticeable appearance at this time was the intense bronzing of the skin especially marked over the shoulders, along the dorsal spines and on the trochanters; in marked contrast to the dirty yellow color of the face was the bright glistening white of the sclera, of the eye-ball. Punctiform and linear grey and bluish-black pigmentation was found on the lips, inner side of the cheeks and on the tongue. The lungs and heart were normal, the pulse small, and often

uneven; with some tenderness in the epigastric region constituted the clinical picture; no other abnormalities, such as glandular enlargements, etc., could be made out. At first a strict dietetic cure was employed, under which the patient improved in weight and the vomiting ceased. On November 16, the first injection was given, which was followed by a typical reaction. On November 20, a second injection was given, followed by reaction eighteen hours later. On November 24, an injection of two milligrams was used that was followed by marked reaction eight hours later. The fifth injection, of three milligrams produced the most marked reaction, the temperature reaching 40° C., and such a degree of prostration as to cause much anxiety, but as the author remarks "it was the only possible method of saving the patient" so he continued the treatment. On December 5, the sixth injection of 3.5 milligrams was given, the temperature rose to 39.1° C., but the appetite and sleep were not disturbed, while vomiting did not occur as it had previously with some of the larger doses. The seventh injection was given on December 9, four milligrams were used, but it did not cause disturbance of the general condition, and only the slightest rise in temperature from 38°, to 38.1° C. December 11, 15 and 20 injections were employed consisting of 5, 8 and 11.5 milligrams respectively. These did not cause the slightest local or general reaction. From day to day the general condition improved, within the last fourteen days an increase in weight of five pounds. The appetite is good, no vomiting, voice strong, in short he presents the appearance of one convalescent from an acute infectious disease. The pigmentation remained unchanged.

The author closes with a brief *résumé* of his conclusions, which are that this method is of great diagnostic value, especially in obscure conditions such as these. He is of course, doubtful of the permanency of the cure, and insists that from time to time the lymph should be injected in large doses. He especially calls attention to the fact that the pulse of this patient did not rise with the temperature as it usually does. This he attributes to a direct inhibitory action upon the vagus, through the local action in the adrenals.

KOCH'S TREATMENT.—DR. ALESSANDRO BORGHERINI gives an account (*Lo Sperimentale*, January 15, 1891), of the results of Koch's treatment in fourteen cases of tuberculosis of the internal organs and two cases of lupus in the Medical Clinic at Padua. Of the former, five were affected with pulmonary phthisis, seven with both pulmonary and laryngeal tubercle, while two suffered from tuberculous disease of the intestines and bones as well as of the lungs and larynx. In all the cases, careful observations were made of the patient's general condition before, during and after the treatment. Every day the sputum, the urine, and the blood were carefully examined. The injections were, as a rule, made every second day, the initial dose being from 0.001 to 0.002g., and the amount being gradually increased by 1 or 2 milligrams at a time. The largest dose given was 0.009g. The reaction had the same general characters which are now familiar, but in two cases in which pyrexia had not previously been present, the fever, which was of intermittent type, still persisted at the date of the report (eight days after the last injection). In two cases the urine showed traces of albumen, which soon disappeared. In the larynx the local process became more acute after the first injections, this effect gradually diminishing till it ceased altogether; the local condition was very considerably modified, while the subjective symptoms were greatly relieved, and in some cases entirely removed. In the lung, the reaction consisted in a series of symptoms at the seat of the primary focus of disease, recalling pneumonic hepatization. The resolution of the hepatized tissue was sometimes speedy, sometimes slow. When it took place rapidly, resonance, which was before diminished, became exaggerated, but there always remained certain local signs, such as râles, harsh breathing, prolonged expiration. In only one case did the physical signs entirely disappear. With the modification in the physical signs, the symptoms were correspondingly mitigated; the cough became easier, the expectoration scantier, and the appetite keener. In some cases it was noticed that the local reaction in the lung was accompanied by vaso-motor disturbance in the cheek of the same side. In nearly all cases diminution of the hæmoglobin in the blood was noted in the early part of the treatment, but this loss was speedily made good, and in three cases there was after a time increase of hæmoglobin. The injections caused slight hæmoptysis in patients who had previously had attacks of bleeding from the lung. As a rule, the bacilli did not diminish in number, but changes in form were sometimes observed. Borgherini sums up his results as follows: In four cases in which the disease was very mild there was "some slight favorable change in the physical conditions of the lung and in the general condition." Other factors, such as careful hygiene, good nourishment, etc., may, however, have contributed to this. In the other cases the morbid process was not modified in any way by the treatment. With regard to the lupus cases, in one (a girl, aged 8), after treatment for about a month, the local condition was somewhat improved, but the nodules could still be seen as numerous as they were before the injections were begun, only a little paler. In the other (a woman in whom the disease was of fifteen years'

standing), the injections did some good, but the reactions were so severe that the treatment could not be carried out to the extent necessary to produce any marked effect. In Borgherini's hands, so far, the injections have not been attended with any untoward result.—*British Med. Journal.*

KOCH'S REMEDY AND ITS RESULTS.—This theme still occupies the attention of several foreign societies, notably the Berliner Medicinische Gesellschaft (*International Klinische Rundschau*, February 8, 1891). Prof. Virchow (meeting of January 28, 1891) claimed that there was but little to add to his report of the last session describing the action of the remedy upon the internal organs. He presented additional specimens, from two patients who had died in the course of the treatment, that showed fresh tubercle in different organs, in so far confirming his earlier expressed opinions.

Dr. Lassar presented a young girl that, following a tubercular inflammation of the hip, developed a large ulcer on the thigh. After a few injections with a small dose, the sore cleared up, and healed, its place being marked by a smooth cicatrix.

Flatau reported a case of laryngeal tuberculosis that at first improved, but later developed additional tubercles upon the vocal cords.

Fürbringer, out of one hundred patients, reports forty-six who have been more than two months under treatment, of these three no longer present the characteristic symptoms, fifteen have been distinctly improved, nine unimproved, and five have become worse, and seven have died. Fürbringer is of the opinion that in florid phthisis, or those presenting marked hectic, or great weakness, should not be treated.

Prof. Pribram (*Verein deutscher Aerzte in Prag.*) reports that sixty cases have been under treatment during the past two months. Of these three, he thinks, may be considered as cured. He also notes several unfavorable results: in one case dangerous hæmoptysis, and in another a rapid extension of the tubercular process that was fatal in eighteen days.

Medicine.

GUAIACUM AND BILIOUSNESS.—DR. W. MURRELL, of London, revives the interest of old practitioners in guaiac, and invites the younger ones to make trial of the almost discarded favorite. In the *Press and Circular* he points out how, in the thirst after novelties in therapeutics, there is a danger that some of our good old-fashioned drugs may get the go-by. This is partly the fault of the text-books on materia medica, for the reason that they mistakenly described the properties of the old drugs in some instances. For example, many books speak of guaiac as diaphoretic and diuretic, while Schmiedelberg, of Strasbourg, groups it among the drugs and preparations used for all sorts of purposes, but now mostly "antiquated or obsolete." Phillips, however, in his well-known work on the "Vegetable Kingdom," recognizes that the drug has a decided purgative action. Dr. Murrell had his attention drawn to the subject a few years ago by casually prescribing for a man suffering from rheumatism some lozenges of guaiac made up with the ordinary paste of black currants. The patient continued to take the lozenges long after the pains had ceased, and in explanation said that they did him good by acting on the liver and bowels. One or two lozenges taken in the morning before breakfast acted as a prompt and convenient laxative. Following up this clue, other patients suffering from constipation and that train of symptoms that are summed up under "biliousness," were treated by the same drug, and a result equally satisfactory followed in many cases. For hospital purposes, the author had a confection prepared containing 10 grs. of guaiac resin to a drachm of honey, and this became a popular purgative in the hospital, besides being used with other remedies in rheumatism, sciatica, tonsillitis and dysmenorrhœa. The dose was increased in some cases to 1 and even 2 drachms thrice daily. Taken in this manner, the purgative and "antibilious" effects are very pronounced; in one case the patient had fifty evacuations in the week. In one case an eruption was produced, covering the arms and legs, not unlike the rash of copaiba. That this kind of resultant rash is most uncommon may be gathered from the fact that Dr. Tilbury Fox did not remember to have seen more than one case like it previously. Intense itching accompanied it, and it ceased soon after the drug was discontinued. The guaiac sometimes gave rise to a sensation of burning in the throat; to obviate this Dr. Murrell frequently made use of a half-ounce of malt extract as a vehicle for each 10 gr. dose of the drug. This worked well, and may be regarded as a kind of *renaissance* of the old-time Chelsea Pensioner, which was compounded of guaiacum, rhubarb, ginger, sulphur, and some other less active ingredients, but they both have an attractiveness to those veteran cases of the hospital and dispensary that complain of torpid liver and bilious attacks. The author believes that the drug will prove itself a very satisfactory laxative or purgative, according to the dose employed. It is possible, also, that if the drug were triturated with cream of tartar, with sugar of milk, or other inert substance, its activity may be enhanced and the size of the dose reduced.

DISINFECTION OF TUBERCULOUS SPUTUM.—In the *Centralblatt für Bakteriologie*, Nos. 1 and 2, 1891, DR. MARTIN KIRCHNER points out that the general consensus of opinion has come to regard the sputum of tuberculous patients as the ordi-

nary means by which tuberculous disease spreads from one individual to another. In many of the large military establishments in Germany it has been shown that tuberculous disease has been very widespread amongst the nurses and attendants upon the sick, and stringent rules are already in force in many such places to prevent the indiscriminate disposal of sputum. Tubercle bacilli are more resistant than some other microörganisms to the action of some antiseptic fluids, but are very easily destroyed by others. Four per cent. carbolic acid, with the addition of 2 per cent. of hydrochloric acid; 2 per cent. and 5 per cent. of sulpho carbolic acid, or 10 per cent. of creolin, will suffice to render tubercle bacilli innocuous in a very short time. Caustic soda and potash, on the other hand, and 5 per cent. of permanganate of potash, have no effect, nor is a solution of 1 in 1,000 of corrosive sublimate sufficient, owing to the highly albuminous character of the sputum in which the bacilli are contained. It has now been proved that tuberculous sputum may retain its infective properties for ten months even after decomposition or drying up. It must, therefore, be equally active as it lies in the various receptacles which have been devised for its reception. The methods by which these vessels are cleaned becomes a matter of considerable importance. Boiling water is used in some places, but it is open to the chance of the water becoming cool before it can be used, and does not do away with the necessity for the wiping of the adherent sputum from the sides of the vessel by the hands of the attendant. A temperature of 70° C. has been shown to be insufficient to render tuberculous sputum innocuous, and the author of the paper believes that absolute disinfection is to be obtained only by means of steam. This plan was advocated by Grancher and De Gennes in 1888, but the apparatus devised for the purpose was cumbrous and costly. Now that there is a general disposition to treat tuberculous cases on much the same lines as leprosy cases, by collecting them together, it should be an absolute law that all the sputum proceeding from such cases should be rendered harmless before it is disposed of in the common drains. With this object, Dr. Kirchner has caused a form of disinfecting kettle to be constructed, consisting of a round metal box about 10 inches high and 16 inches in diameter, its floor forming a shallow tank to hold the water to be vaporized, the whole being covered with a lid perforated at one point for the passage of a thermometer. In this box are placed two or more trays, perforated to permit of the free circulation of steam, and so arranged as to carry five spitting-cups of the special pattern which he uses. These cups are placed for half an hour within this apparatus, heat being maintained so that the temperature of the steam never falls below 100° C. A strong protest is made against the use of the ordinary spittoon, whether filled with sawdust or some antiseptic fluid. The spittoon is of necessity too far removed from the patient's mouth to ensure that all the expectorated matters are collected by it. The state of the floor round and about any spittoon in a public place is appealed to as sufficient evidence of the truth of this statement. Small cups made of glass, with wide lips and easily cleaned, should be used in preference to the spittoon, but must be placed within reach of the patient's hand, and be clearly labelled. These cups must be placed in the disinfecting box for half an hour before they are emptied, and their contents may then with safety be treated by simple washing.—*British Medical Journal.*

Surgery.

STOMACH RESECTION.—February 6 DR. PORGES presented to the Aerztliches Veremsleben, in Wien, a middle aged man in whom Prof. Maydl, the previous August, had resected at least half of the stomach. The carcinomatous mass was adherent to the pancreas, necessitating a removal of a portion of that gland, as well as a part of the greater and lesser omentum. The patient apparently fully recovered and up to the present has shown no signs of a return of the disease. In discussing the case Kahler contended that the entire removal of the stomach was practicable, as the small intestine was amply sufficient to provide nourishment.

Bacteriology.

ACTION OF KOCH'S LYMPH ON HEALTHY ANIMALS.—M. JACCOUD has recently communicated to the Académie de Médecine, Séance du 10 Février, 1891 (*Le Bulletin Médicale*) the history of a guinea pig that was inoculated with Koch's lymph, and subsequently with the tubercle bacillus. The pig, exceptionally robust and strong, weighing 580 grams, received two series of daily injections separated by an interval of eight days, the one extending from the 8th to the 18th of December, and the second from December 27 to the 4th of January; in all 50 centigrams of the liquid were used, or 25 in each series. On the 5th of January the animal was inoculated upon the shoulder with tubercle taken from a tuberculous guinea pig. It succumbed one month later with all the typical signs of tuberculosis,—grey confluent granulations in both lungs, a hæmorrhagic hepatization in the upper part of the right lung, and caseous tubercle in masses in the spleen and liver. This species of guinea pig (angora) usually survives longer than one month, therefore the particular animal presented the minimum of resistance and the maximum of pathological change common to its species, proving that Koch's remedy does not act as a preventive. Another and smaller guinea pig was inoculated at the same time with a portion of the same tuberculous matter; at the time of the report this animal was still alive.

THE
Journal of the American Medical Association
PUBLISHED WEEKLY.

SUBSCRIPTION PRICE, INCLUDING POSTAGE.

PER ANNUM, IN ADVANCE.....$5.00
SINGLE COPIES.....10 CENTS.

Subscription may begin at any time. The safest mode of remittance is by postal or express money order, drawn to the order of THE JOURNAL. When neither is accessible, remittances may be made at the risk of the publishers, by forwarding in REGISTERED letters.

Address
JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION,
No. 68 WABASH AVE.,
CHICAGO, ILLINOIS.

All members of the Association shou send their Annual *Dues* to the *Treasurer*, Richard J. Dunglison, M.D., Lock Box 1274, Philadelphia, Pa.

LONDON OFFICE, 57 AND 59 LUDGATE HILL.

SATURDAY, MARCH 14, 1891.

THE PURPOSE OF "THE JOURNAL."

Our views with reference to the preparation of papers for presentation and discussion in the several Sections at the annual meetings of the Association, as presented in the last number of THE JOURNAL, we trust will not be considered as strictures upon legitimate work. If the humblest member of our profession has a single unknown fact, an observation of value not hitherto recorded, a special method of operation, or a practical suggestion with reference to the action of a remedy or the method of administration of which the profession should be advised, he certainly will not be deterred by what was written from the fulfillment of an obvious duty. But if, on the other hand, one shall be simply ambitious to place himself on record and propose to bring as his contribution the cerebrations of other brains better recorded elsewhere, if from our suggestions he shall deem it wiser to accord the field to those who write of what they themselves have wrought, then the purpose of our writing will not have been in vain. If more and more, in the future, the "Original" department of THE JOURNAL can be made to represent original thought and original researches of our foremost medical men—whose articles it were a credit to publish, and a pleasure to peruse, one of the grandest purposes of THE JOURNAL will be attained.

If, in this connection, the concurrent labors of an able corps of editorial writers can be assured; if the current literature of the day can have ample and judicious representative expression; if the best of foreign literature can be secured, and the proceedings of medical societies and organizations can be tersely and impartially abstracted, and THE JOURNAL itself remain absolutely divorced from political and partizan purposes, then, if we rightly estimate, will it be prepared to render strong and legitimate assistance in the *uplifting* of journalism in this country. This is our hope and our anticipation as the future achievement of THE JOURNAL.

We wish to be in utmost harmony with all legitimate journalistic work and workers in the fulfillment of possibilities as set forth in another article in this issue, in which reference is made to the coming meeting of the Medical Editors' Association.

THE MEDICAL EDITORS' ASSOCIATION.

This Society, although only a few years old, is practically the most influential and important in the country. Everywhere it is apparent that medical journals are taking the place of volumes and text-books. Medical readers want the latest facts concerning every movement of science, in the laboratory, bedside and hospital practice.

The value of such facts are recognized, not only by the isolated country physician, but medical teachers in crowded cities, and busy physicians, who have little time for reading volumes. While medical journalism is yet in its infancy compared with what it will be in the coming century, its educational power and value is felt in every circle of science. It is fatal to egotism and dogmatic conceptions of theories in science, and points out the fact that no one, however eminent, can fully master all the facts, or apply them in the practice of healing. The formative power of the press is really greater than medical colleges, for it not only shapes the action of educational forces, but it continues through all the after professional life of the student. It is literally a teacher that is always present. The majority of the editors of the medical press realize this power, and use it to promote the higher interests of science.

A small and ever decreasing minority still cling to the idea that medical journals are only valuable in proportion as they serve some personal, selfish ends, or become the organ of a faction or a party. They form their conceptions from the secular press and politics, and it is needless to

say that in the long run they foster conditions which will result in their own destruction. All medical journals have a local personality, and quite naturally give prominence to some college, or teachers, or even a publishing house. But this localism is generally subordinate, and rarely ever assumes the superiority over all others, of its college, teachers or publishing house.

The great art of good journalism is to have a distinct personality, that is broad, clear and generous, above all low levels of impulse and feeling; also to discriminate the value of facts and theories above the authors, or sources; and be able to determine their place and meaning in science. This is an art that must be natural, as well as cultivated, and requires as distinct talents as in surgery, or in other fields of medicine. Among medical journals in this country there are notable examples of great ability in this direction.

The number of journals is steadily increasing, and the process of the "survival of the fittest" is going on with unerring certainty. The standard and editorial tone is rising constantly; a broader generosity and feeling prevails, and scientific kinship is springing up. As the medical press rises in scientific conceptions of medicine, the old rivalry dies away, and the great ocean of undiscovered truth looms up, where each can sail alone, without crossing his neighbor's track, and beyond all contest and rivalry.

The coming meeting of medical editors should include every medical editor in the country. A personal exchange of opinions, and personal acquaintance, are large factors in developing the best interests of each. The day for fulsome admiration, bitter personalities, and hilarious eating and drinking has gone by. The time has come for united work, and every medical editor should join his influence and power to make the Association a true exponent of American medicine. With a united medical press, many of the existing abuses in medical education and charities would be corrected. The low estimate of the profession by public opinion would be a thing of the past. While the Medical College Association and Societies can do much to advance the standard of medicine, a united medical press can do more; this is apparent in the increased quotations of opinions of journals on points of interest.

The profession will watch with increasing interest the coming meeting of the medical editors, not that they will cause any great revolutions of science, but the more united they become in both personality and scientific interest, the better their work. While science is truly cosmopolitan, every journal and medical man ought to cultivate a National pride and ambition to distinguish facts and principles of medicine as clearly and quickly as foreigners.

Journalism ought to lead and direct the observer to fields of discovery that are as accessible from this country as elsewhere. Concentrate the medical press in work and interest, and the road is open for brilliant discovery.

TREATMENT OF PHTHISIS.

The treatment of disease of the respiratory tract by the inhalation of gases or medicated air attracted attention in the childhood of medicine. The bringing of the curative agent in direct contact with the diseased surface was apparently so rational a procedure that few could doubt its utility, and yet of all the fantastic methods that have been devised, and the various inhalants that have been introduced with such *éclat*, none of them attained permanent popularity. This inhalation treatment of phthisis has ever proved an *ignis fatuus*, leading men into all sorts of pathological sloughs and etiological pitfalls. The discovery of the tubercle bacillus has but added an impetus to the mad race for something that would kill the parasite and not harm the host. Can we hope to kill the tubercle bacillus in the lung by inhalation? Certainly not, because the remedy does not come in contact with the bacillus. The most powerful disinfectant known, unless brought in direct contact with the germ, will not destroy it—if the most infinitesimal part of an inch intervene its action will be prevented. Now if the tubercle bacillus were swimming around in the bronchial secretion on the surface of the epithelial cells we could accomplish something with our disinfecting gas, but unfortunately it is situated deeply in the tissue of the lung, in the giant cell, and often encapsulated in connective tissue. It is apparent that any direct effect that the inhaled gas may have upon the bacilli is due to its absorption, and action through the blood. We do not wish to be misunderstood; it is not claimed that inhalations may not be *useful* in phthisis, the catarrhal conditions and mixed infections that accompany the

disease may be greatly benefited, but they can not kill the bacilli directly.

It would seem that many of our professional friends had lost sight of the etiological factor in phthisis. Are the broad-chested, healthy and robust especially prone to this disease, or is it one that is liable to attack the puny, ill-nourished and narrow chested? And are not these conditions favored by over-crowding, ill ventilated school-rooms, long hours of study and cramped positions, with the attendant imperfect expansion and passive congestions of the lungs? Too much analogy has been assumed in the various microbic disorders. Take, for example, small pox, how different are its etiological relations; attacking indifferently the strong and the weak, self-limited in its nature and one attack conferring immunity. If these things were true of phthisis how much more might be hoped for from medicinal treatment? Is it not time that scarlet fever should be brought under control, and its ravages limited, as have been those of small-pox?

We submit our view, and not without trepidation, that the tubercle bacillus will hold its own against all the sulphuretted hydrogen, chloride of gold, pneumatic cabinets, hot air or lymph that can be brought against it. Many of these remedies may prove to be most useful in the treatment of phthisis, but the danger now is that their too enthusiastic advocates will forget the predisposing and exciting causes of this disease and with the inevitable resultant failure will come a therapeutic nihilism, that will work to the discredit of scientific medicine. In conclusion we cannot refrain from calling attention to the words of KOCH, to show how clearly he recognized these limitations when he said: "How far the present methods of cure, mountain climate, open air treatment, etc., may be combined with the new measure is not yet determined, but I believe that these curative factors may be usefully employed in many cases, especially in neglected and severe forms as well as in the convalescent stage."

THE ANTI TUBERCULOSIS INOCULATION TREATMENT OF RICHET.

During the past two years, a series of communications has been made to the Society of Biology at Paris, by RICHET and HÉRICOURT, giving their results obtained by intravenous injections and inoculations for the relief of tuberculosis. They have not been limited to any one inoculation-material, but since April, 1890, their attention has been especially directed to the blood of animals refractory to tuberculosis, as the dog, although they have also used non-bacillar products from old tubercular cultures. They have lately reported that dog's blood has been demonstrated to have a retarding effect in the case of rabbits where tuberculosis has been artificially produced, without, however, arresting the disease altogether. They next undertook to intensify, if possible, these partially protective properties of canine blood, by inoculating a dog with unmistakably active tuberculous matter, in large doses, and one month later, the animal having meanwhile lost flesh and given manifest signs of ill-condition, injected into the peritoneal cavity of three rabbits about 2.4 fluid ounces of this dog's blood. One week later, these rabbits, were with three other test rabbits injected with strong tubercular virus, with this result that in twenty-five days two of the latter were dead, while the others survived. Their next step was to extend the application of their method to tuberculous human beings, using the blood-serum only and injecting it subcutaneously in the interscapular region. This was done early in last December upon four males. RICHET reported, January 24, to the Society of Biology, that the treatment has appeared to counteract the progress of the disease to some extent, at least, in all four cases; two of whom are affected with pulmonary phthisis, while the other two have both the larynx and lungs involved. Eighteen days after the treatment was begun the physical signs were markedly reduced, night-sweats had been suppressed, and the appetite of the patients had improved, as well as their weight and strength, one of them had gained in weight fully nine pounds in that period; that of the others in a less degree. The laryngeal patients had been relieved of that distressing agony formerly experienced on deglutition, the epiglottis which had been very swollen and motionless had become reduced in volume and regained its mobility. In all the cases, the interscapular region became the seat of itching, some time after the injections, and attained its maximum twenty-four hours later. The size of the dose of injected

serum was stated at about fifteen minims to a fluid drachm, which was administered in from three to six days. No constitutional reaction occurred, and the local disturbance was very slight; pain was complained of after two treatments only.

THE SPHERE OF WOMEN MEDICAL PRACTITIONERS IN CHINA.

The Edinburg Medical Missionary Society publishes, in its quarterly paper for February, 1891, some facts regarding the sphere for female medical attendance among the women of China. Not only is medical skill lacking and of most indifferent quality among the Chinese, but even such as it is it can hardly be obtained by the women, because the native practitioners are males and it is not considered proper for them to treat female patients. Under some conditions an old woman of experience in obstetrical and children's complications may attain to some consequence in a limited locality. But there is a vast female population that has practically no medical attendance whatever; and if the children are included with the women, as they must be to the extent of many millions, the needs of China for female medical attendance will be found to be in the thousands. The number of practitioners who can satisfy these demands can never be supplied from Western lands. The constant aim of all well-wishers of China must be to raise up a supply from among the natives themselves; and fortunately it has already been proved that there is no want of capacity in the Chinese female mind in this direction. Certain difficulties have been, and will continue to be, met in Oriental life and habits of thought, as to women taking a prominent or professional position, especially during young and middle life, but these can be overcome by wise fathers and husbands and by senior female counsellors who have broken away from their old superstitions. In many respects the Chinese are intensely practical, and are not slow to see if a new proposition will pay. This is all that is needed to insure the progress of the movement. The economic wisdom of the people will soon teach them that it is wasteful not to take better care of their women and children, if for no other reason, at least for that which prompts to the care of cattle. The family is much stronger among them than is generally supposed, and China is the land of the family, in an eminent degree. The pride of country is, also, intense, and leads them to no little exultation when one of their countrywomen has shown herself to be a skilled physician. Western healing has a strong popular hold already. Its results often appear to be almost miraculous; so that by the time a good medical training can be supplied to native women and acquired by them, the demand for them will be sure to be far in excess of the supply.

EDITORIAL NOTES.

SPECIAL NOTICE TO THE OFFICERS OF SECTIONS.—It is not only desirable, but necessary, that those who have in hand the work of securing papers for presentation in the several Sections at the coming meeting of the Association, shall complete their work at an early date. The programmes for the Sections should be in type as early as April 10, and revisions secured at once. The entire programme, thus completed, will be *copyrighted* and published in a single issue of THE JOURNAL, and also in pamphlet form for general distribution. The appropriation of this programme, in whole or in part, by scheming publishers or advertisers, as in times past, we trust will not be attempted.

Officers of the Sections! An important responsibility is upon *you*. The value of the papers which you solicit must largely determine the value of the Original Department of THE JOURNAL for the coming year. Let your selections be well made. Let your work be completed promptly.

SPECIAL NOTICE.—In consequence of the conflict of dates of the American Medical Association and the Indiana State Medical Society, the date of the meeting of the Indiana State Medical Society has been fixed for June 10, 1891, the *second* Wednesday.

CHANGE OF TIME OF HOLDING THE MEETING OF THE NATIONAL ASSOCIATION OF RAILWAY SURGEONS.—On account of the meeting of the American Medical Association at Washington, D. C., on May the 5th, and continuing to the 8th, it has been thought best by the officers of the National Association of Railway Surgeons to change the time of meeting from May 7 to April 30. The meeting will be held at Buffalo, New York, beginning at 10 o'clock A.M., and continuing to May 3. This change will give the sur-

geons who have a long distance to travel an opportunity of attending both meetings on one trip. Remember the change from May 7 to April 30. Any further information desired can be had by addressing Dr. E. R. Lewis, Kansas City, Mo., or Dr. A. G. Gumaer, Buffalo, New York. The meeting promises to be well attended by surgeons from all parts of the country.

NOTICE TO MILITARY SURGEONS OF THE NATIONAL GUARD.—Dr. N. Senn, of Milwaukee, Surgeon-General of Wisconsin, is desirous of obtaining the name and address of every surgeon of the National Guard in the United States for the purpose of taking the necessary preliminary steps towards the formation of a permanent National Association.

THE HASSEKI HOSPITAL FOR WOMEN AT CONSTANTINOPLE.—Hospitals are an index of the progress of civilization, their establishment and support always means progress in science and art. We note an excellent description by Pechedimaldji in the *Revue Médico-Pharmaceutique* on the Hasseki Hospital for Women, situated in one of the most populous quarters of Constantinople. The sun of humanity is rising upon the women of the East.

KOCH'S REMEDY AND ITS RESULTS.—Under the head of "Progress" in this issue appears an abstract of the proceedings of the Berlin Medical Society, in which Prof. Fürbringer reports forty-six cases of pulmonary tuberculosis that had been under treatment for *more than two months*. The results are certainly not what we had hoped for—three cures and seven deaths. The death-rate in this treatment is proving exceptionally high, and the statistics so far as they are at hand show more fatalities than recoveries.

IMPORTANT NOTICE.—An announcement was recently made that an Army Medical Board would be in session in New York City during April next for the examination of candidates for appointment in the Medical Corps of the United States Army, to fill existing vacancies. At the time of that announcement there were only five vacancies to be filled. Recent Congressional legislation has, however, permitted the retirement of certain officers, so that there are now fourteen vacancies in the grade of assistant surgeon, with the probability that the number will be increased to seventeen by the time the examining board begins its labors. As already stated, persons desiring to present themselves for examination by the Board will make application to the Secretary of War, before April 1, 1891, for the necessary invitation, stating the date and place of birth, the place and State of permanent residence, the fact of American citizenship, the name of the medical college from which they graduated, and a record of service in hospital, if any, from the authorities thereof. The application should be accompanied by certificates based on personal knowledge, from at least two physicians of repute, as to professional standing, character, and moral habits. The candidate must be between 21 and 28 years of age, and a graduate from a Regular Medical College, as evidence of which his diploma must be submitted to the Board. Further information regarding the examinations may be obtained by addressing C. Sutherland, Surgeon-General U. S. Army, Washington, D. C.

THE MEDICAL SOCIETY OF THE MISSOURI VALLEY will meet at Omaha, Neb., March 19 and 20. Papers will be read by Drs. A. F. Jonas, Omaha; J. M. Emmert, Atlantic; Flavel B. Tiffany, Kansas City; Donald Macrae, Council Bluffs; S. Stewart, Council Bluffs; J. E. Summers, Jr., Omaha; J. F. White, Council Bluffs; S. G. Gant, Kansas City; H. Gifford, Omaha; Rebecca Hanna, Red Oak; and J. P. Lord, Omaha.

RECENT STATUS OF KOCH'S METHOD.—The French and German medical press have devoted a very considerable part of their space for the past two months to accounts of trials and results obtained by the use of the lymph. We have from time to time presented our readers with abstracts of the more important and typical contributions. Their number has now become so large that to abstract even a part of the mass would require vastly more space than the editor has at his disposal. At the same time owing to the wide range of cases in which the remedy has been employed, the great variation in results and the want of uniformity in method of reporting would make any statistical compilation at this time not only useless, but positively misleading. French writers have been skeptical from the start, but some of them report favorable results in isolated cases. This is shown in the abstract, given in "progress" of this week, of thirty-

eight cases of lupus treated in the French hospitals. The German medical press has become more conservative in their claims, and they report many unfavorable effects of the remedy. A careful examination of the communications to date would seem to show that the method has a substantial range of usefulness, though it comes far short of the too sanguine earlier expectations.

MEDICAL ITEMS.

THE MICHIGAN STATE BOARD OF HEALTH.—The recently inaugurated Governor of Michigan is understood to advise the abolition of the State Board of Health, and it is feared by many that the Legislature will act accordingly. It is to be regretted that such an important element in the general welfare of a commonwealth is liable to be sacrificed. The Michigan State Board of Health has for years performed an excellent service to the people of that State, and certainly deserves better recognition than threats of extinction. It is to be hoped—for it assuredly is to be expected—that the intelligence of a State Legislature will not be so myopic and unmanifested as to permit the value of State Medicine to remain unheeded and uncared for.

HOW TO DISPOSE OF A HOPELESS INVALID.—A writer in the lay press has lately advanced a somewhat singular method of relieving the incurable. The plan has certainly the merit of permanency if not that of practicability, or any other winning virtue. Endeavoring to argue from a humane point of view, not only as to the patient himself, but as well those surrounding and intimately connected with the pains and sorrows of the invalid, the writer creates his plea of *killing those so afflicted*. Really, this plan is not new, it has been advocated before, and actually—in earlier ages—put into practice. It is merely noticed here as an example of the ingenuity of the human brain in its effort to meet all conditions of environment, and the extreme views to which those dwelling upon euthanasia may arrive.

HYGIENE IN PHILADELPHIA.—Mr. Henry C. Lea, of Philadelphia, has given a sum of $50,000 to the University of Pennsylvania for the erection of a hygienic laboratory. The plans have been revised by Dr. John S. Billings, who has embodied in them the results of his observations during a scientific tour in Europe. The institution will, it is stated, be the finest of the kind in the world—till some other American millionaire builds a grander, or at least a bigger, Temple of Hygiene somewhere else. It is to be provided with lecture rooms, museums, bacteriological and photographic rooms, a crematory, a separate building for the rabbits, guinea pigs, and other animals used for experiments.—*British Medical Journal.*

DRS. SHURLY AND GIBBES.—These gentlemen appeared before the Medical Society of the State of New York, at its fifty-fifth annual meeting held in Albany, on February 3, 4, and 5, and gave a résumé of consumption, as it is considered by them, both pathologically and therapeutically.

THE HARVARD MEDICAL SOCIETY OF NEW YORK CITY, of which mention was made in the last issue, has perfected its organization by the election of the following officers: President, Dr. Rufus P. Lincoln; Vice-President, Dr. Paul F. Mundé; Secretary, Dr. Dillon Brown; and with an Executive Committee consisting of the President, Secretary, Dr. Frederick R. Sturgis, William J. Morton and Henry C. Coe. Meetings are to be held on the first Saturday of each month, except June, July, August and September.

A NEW SCIENTIFIC SOCIETY has just been started at Philadelphia, the main object of which is to examine critically the brains of distinguished decedents. It is said the operations of the society will be limited to persons holding diplomas from the University of Pennsylvania. We trust this is not a masked effort to "boom" a worthy institution of learning.

DECREASE OF LUNACY.—The report of the Commission in Lunacy of the State of New York shows, through the means of improved methods of registration and returns which have been adopted, that there is a material decline in the proportion of lunatics to population. Not alone are the improved records responsible for the more gratifying figures; but the advanced ways of treatment have had no inconsiderable part in the observed result. The term "chronic" with reference to the insane is having a more modified application. Better housing and attention, together with broader views generally, are working factors.

DR. W. W. DALE, a leading physician of Southern Pennsylvania, died at Carlisle, February 26, of pneumonia, aged 74 years.

TOPICS OF THE WEEK.

THE DEBATE ON KOCH'S REMEDY AT THE BERLIN MEDICAL SOCIETY.

The subject of Koch's remedy still continues to be discussed at the Berlin Medical Society every week, the proceedings on February 7 being as follows:

Professor Virchow exhibited the lungs from a case treated at the Augusta Hospital with twelve injections from December 4 to January 12. In each lung, especially the left, were circumscribed areas of dense pigmented carnification, intersected by whitish bands of "dissecting pneumonia" or spaces filled with pus and caseous material. But there was no true caseous hepatization. Another specimen, from a patient who had received thirty injections, illustrated the passage into gangrene of acute "smooth" hepatization. There were large apical cavities, and recent as well as old pleurisy, whilst the lower lobes showed areas of recent catarrhal pneumonia already breaking down. There were numerous healing ulcers in the colon. A third case was one of phthisis complicated with syphilis and amyloid disease; only two injections had been given. The phthisis was acute, and there was extensive cicatrization of laryngeal ulceration. Lastly, he exhibited specimens from a case of hip disease in a child aged three years and three quarters. The head of the femur had been recently excised, and prior to that the child had had five injections. Death occurred from acute miliary tuberculosis, tubercles being well seen in the bone marrow. They also occurred in the lung, and the rare (in child) complication of arytenoid perichronditis was present. Professor Virchow deprecated very strongly the statement that in many cases (especially the fatal ones) the injections had been made on experimental grounds and with no therapeutic aim.

Dr. P. Guttmann showed a case of inoculated tubercle on the ring finger, in which the diagnostic reaction of Koch's fluid had been confirmed by microscopical examination of excised portions. The "warts" were attributed to inoculation of an abraded surface from a corpse which the man (a hospital porter) was engaged in carrying. Under the treatment they much diminished.

Dr. Grabower had no doubt as to the supervention of fresh miliary nodules in laryngeal cases under treatment, but he did not think this serious; it rather showed that the treatment should be continued. In two cases, which he exhibited, such nodules appeared without any pre-existing disease of the larynx. He gave the details of these cases, both early pulmonary phthisis with bacillary expectoration. In the one laryngeal symptoms arose after the twenty-fourth injection, and examination showed swelling of the false cords and a profuse eruption of grey miliary tubercle. These nodules soon became confluent, but entirely disappeared during the continuance of the injections. The other case was very similar, except that the nodules had not been yet wholly removed. He had often noticed this rapid subsidence of laryngeal tubercle after a few injections, and without denying the possibility of infection by contiguity, he regarded their appearance as a direct indication for persevering with the treatment.

Dr. Jolly, who resumed the debate on Professor B. Fraenkel's paper, directed attention specially to the mental disturbance excited by the fever caused by the injections in some cases, analogous to other febrile "psychoses." He mentioned two cases in Professor Leyden's wards, one a man who had pleurisy with effusion, and who had become depressed mentally by his long illness. The injections (2 to 7.5 mgr.) produced very notable febrile reaction (38.3° to 40°), during which he always became dull and confused. After five injections they were discontinued, and two days later he began to have delusions and was transferred to the insane ward, where his delirium continued to increase. However, these mental symptoms disappeared in a fortnight; they were compared by Dr. Jolly to the delirium of defervescence or post-febrile delirium, not infrequently seen. The man was predisposed by his former depression, and by the excitement attending the hopes of cure by the new remedy. The other patient was in an early stage of phthisis but very wasted, and much enfeebled mentally as well as physically. Although very little fever followed the injections there was severe headache on each occasion, so that after four had been given they were remitted for a time. Then they were again used, and he received fifteen more, always suffering severely from pains in the head. He also lost weight. He then lapsed into a state of melancholia with marked delusions. Mention was also made of a hysterical subject who became markedly delirious after each of three injections she received; she had been very delirious previously during the hectic fever of the phthisis from which she suffered. Although such symptoms might arise only in a minority and were seldom permanent, yet occasionally (in predisposed subjects) they initiated an incurable disorder. Hence the need to proceed very carefully with injections in such subjects.

Dr. Henoch spoke unfavorably of the treatment in pulmonary tuberculosis of children, of whom he had treated twenty by this method. Three of these were in the "advanced" stage, but without fever; they were all made much worse, the fever induced by the injections persisting as hectic. Yet only ½ mgr. (at first he only gave 1–10 mgr.) was given at the commencement of treatment, and the largest dose was 3 mgr. In one case there was temporary improvement, dulness disappearing; only, however, to return with increase of other signs on continuance of the injections. Another case illustrated Professor Virchow's statements. A girl 11 years old, whose mother had recently died from phthisis, had suffered from a cough for a year; but there were hardly any physical signs, except slight dulness near spine of scapula, prolonged expiration, and some rhonchus at apices. An injection of ½ mgr. gave no reaction. One of 1 mgr. produced next day a rise of temperature to 38.6°, and some râles appeared at the left base. Five injections in all were given, and a few days after the last, signs of extensive consolidation of the left lung appeared; and even after a month's interval they had very slightly decreased. Obviously it was not a mere transitory hyperæmia, but whether caseous or catarrhal hepatization could not be determined. There was some suspicion of commencing

excavation, for the breathing, which was intensely bronchial, had an occasional amphoric tone, and the râles were metallic. Prof. Henoch attributed this change without doubt to the injections. He said not one of his cases had been "cured," not one "improved" except the one which subsequently relapsed to a worse state; and he was embarrassed to decide if he should continue the treatment in children any longer. It would be ludicrous in the case of a child to follow the practice of some physicians who do not use the injections except at the patient's own wish. Bearing in mind the tendency for tubercle in children to be dispersed in many foci throughout the body, he felt one would be justified in only using it with the greatest reserve, and perhaps at no distant date in discontinuing the practice altogether.—*The Lancet.*

SOME MILK STATISTICS.

The *American Analyst* says that there are $2,000,500,000 invested in the dairy business in this country. That amount is almost double the money invested in banking and commercial industries. It is estimated that it requires 15,000,000 cows to supply the demand for milk and its products in the United States. To feed these cows 60,000,000 acres of land are under cultivation. The agricultural and dairy machinery and implements are worth $200,000,000. The men employed in the business number 750,000, and the horses over 1,000,000. There are over 12,000,000 horses all told. The cows and horses consume annually 30,000,000 tons of hay and nearly 90,000,000 bushels of cornmeal, about the same amount of oatmeal, 275,000,000 bushels of oats, 2,000,000 bushels of bran, and 30,000,000 bushels of corn, to say nothing of the brewery grains, sprouts, and other questionable feeds of various kinds that are used to a great extent. It cost $450,000,000 to feed these cows and horses. The average price paid to the labor necessary in the dairy business is probably $20 per month, amounting to $180,000,000 a year. The average cow yields about 450 gallons of milk a year, which gives a total product of 6,750,000,000. Twelve cents a gallon is a fair price to estimate the value of the milk, at a total return to the dairy farmers of $810,000,000, if they sold all their milk as milk. But 50 per cent. of the milk is made into cheese and butter. It takes 27 pounds of milk to make 1 pound of butter, and about 10 pounds to make 1 pound of cheese. There is the same amount of nutritive albuminoids in 8½ pounds of milk that there is in 1 pound of beef. A fat steer furnishes 50 per cent. of boneless beef, but it would require 24,000,000 steers, weighing 1,500 pounds each, to produce the same amount of nutrition as the annual milk product does.—*Dietetic Gazette.*

THE FEVERS OF CHINA.

Dr. Coltman, writing in the China medical missionary journal upon the fevers of China, remarks that but little personal investigation on the subject has been made up to the present time, owing to the comparatively recent advent of foreign medical men, and to the want of confidence on the part of natives to submit for any lengthened period to the treatment of a foreign physician, or in fact to any one physician, their rule being to change doctors two or three times a day if they can afford it. Again, there have been but small hospital facilities for studying fevers, and there is an impossibility of obtaining post-mortem examinations. Dr. Coltman considers that small-pox is the most common disease, nearly every person suffering from it at some period of his or her life. Vaccination, although practiced, is done very carelessly. Measles appear to be common, but is somewhat milder than in Europe. Scarlet fever, althought it undoubtedly occurs among the natives, is far less common than amongst Europeans. Erysipelas is rare. Typhoid fever is very difficult to diagnose in the short time that a foreign medical man is allowed to attend a case; but Dr. Coltman thinks that when more accurate reports are possible, this disease will be found to be more common among the natives than is now supposed. Typhus fever is met with all over North China, and as far south as Shanghai. Relapsing fever is found constantly associated with typhus. Dengue does not seem to be known amongst natives. Cholera occurs as an epidemic every few years, and is very fatal. Diphtheria is severe and frequently fatal amongst the natives. Whooping-cough has occasionally been met with. Rheumatic fever is very prevalent in some parts. Chronic muscular rheumatism is common all over China, but is unattended by fever. Malarial fevers appear to be common everywhere, though the prevailing type varies; thus, tertian is most common in Pekin, quartan in Foochow, Swatow, Shanghai and Hangchow, and remittent in Cheefoo and Tientsin. In Chinanfu Dr. Coltman has never seen a case of quartan ague; it is all intermittent of the tertian or quotidian type. The treatment, of course, of all malarial fever is by quinine or some other cinchona bark alkaloid. In Hangchow the carbolic acid and iodine treatment has been used successfully as a prophylactic; arsenic is recognized as valuable in the chronic form.—*Lancet.*

THE BARRING OUT OF FOREIGN DIPLOMAS BY THE ILLINOIS STATE BOARD OF HEALTH.

This action was taken because: 1. The diplomas of medical schools and universities do not entitle the holders to practice in these countries; 2. As may be seen from p. viii of the "Report on Medical Education" of the Illinois State Board of Health for 1891, the Prussian Staats-Examer Commission rejected in 1890 more than 40 per cent. of the graduates of the University of Berlin, more than 47 per cent. of the Breslau graduates, more than 31 per cent. of the Griefswald and Halle graduates—and in fact more than 29 per cent. of the university graduates that came before the commission; 3. Many of the rejected candidates come to this country; 4. Many such graduates, fearful of failing in the government examinations in their own countries, come to this country to enjoy a privilege denied them at home of practicing medicine simply on their diplomas; 5. The Illinois State Board of Health feels that it should not place upon such diplomas a higher valuation than is given to them in the countries in which they are granted.

PRACTICAL NOTES.

ROTTER'S ANTISEPTIC.

℞ Zinc chloride.
Zinc sulpho-carbolate, āā 3.00 grams (45 grains).
Boracic acid, 1.80 grams (27 grains).
Sodium chloride, 0.15 gram (2½ grains).
Salicylic acid, 0.33 gram (6 grains).
Citric acid.
Thymol, āā 0.06 gram (1 grain).
Water, 473.12 c.cm. (1 pint). M.

This solution is used for compresses, irrigation of wounds, etc., in surgery.—*Merck's Bulletin.*

IODIDE OF POTASSIUM IN GONORRHŒAL RHEUMATISM.

Rubinstein strongly recommends (in the *Therapeutische Monatshefte*) the treatment of arthrites and inflammations of the mucous bursæ with potassium iodide after the following formula:

℞ Potassium iodide, ℈ iv.
Distilled water, ℥v.
Mix and dissolve. Sig.: Tablespoonful every hour for two or three days.

Amelioration usually begins after three or four doses. Rubinstein reports fifteen cases of acute and subacute gonorrhœal rheumatism treated in this manner with the happiest results. —*National Druggist.*

TO REMOVE THE PIGMENTATIONS OF PREGNANCY.

In the *Journal de Médecine de Paris*, January 4, 1891, the following ointment is recommended to be rubbed into the affected parts twice daily to remove the pigmentations which so often disfigure pregnant women:

℞ Cocoa butter.
Castor oil, āā ℥ij¼.
Oxide of zinc, gr. v.
Yellow oxide of mercury, gr. ij.
Essence of roses, enough to perfume.

A MIXTURE FOR SIMPLE COLIC.

Dujardin-Beaumetz, it is stated, recommends the following mixture in the treatment of colic:

℞ Strong chloroform-water, 4 ounces.
Decoction of orange-flowers, 4 ounces.
Tincture of capsicum, 2 drachms.

A dessertspoonful of this mixture may be given every fifteen minutes until the pain is relieved.

THE TREATMENT OF GALL-STONES.

Dr. W. W. Seymour, of Troy, in a paper on this subject, after reviewing all the theories as to the possibility of successfully dislodging, dissolving, or otherwise effecting the removal of gall-stones by medicinal agents, concluded with the emphatic opinion that these accretions could not be dissolved, and that all medical treatment for their dislodgment was likely to prove valueless. He held that operation should be early resorted to in a well-defined case, and an exploratory incision should be made where doubt existed. The mortality, where the operation was undertaken before complications had arisen, was but small, and it should be remembered that a post-mortem diagnosis was of no use to the patient and of very little consolation to the friends.—*New York Medical Journal.*

THE TREATMENT OF SYPHILIS DURING PREGNANCY.

Besnier (*Journal de Médecine*, November, 1890), has obtained good results in the treatment of syphilis, during pregnancy, by the administration of cinchona wine and syrup of the iodide of iron as tonics, together with nourishing food. The patient also took daily a pill containing one sixth of a grain of bichloride of mercury, combined with one twelfth of a grain of extract of opium and one twelfth of a grain of extract of gentian, the whole rubbed up with glycerine. Iodide of potassium was also advised in amounts of from seven and a half to fifteen grains daily.—*American Journal Medical Sciences.*

TREATMENT OF INGROWN NAIL.

Dr. Pürckhauer moistens the surface of the diseased nail with a luke-warm forty per cent. solution of caustic potash, and then scrapes off the softened upper layers with a sharp-edged piece of glass. After a second application of the potash solution the scraping is continued until the nail is as thin as a sheet of paper. It is then lifted up from the soft parts with forceps, and the diseased parts are excised.—*Therapeutic Gazette.*

PREPARATION OF SACCHARIN.

℞ Saccharin, 150 grains.
Bicarbonate of soda, 75 grains.
Distilled water, Oij.

One part of this solution is equivalent to two and one-half times as much sugar.—*Nouveaux Remèdes.*

UNNA'S TREATMENT FOR RED NOSE.

When red nose is due to acne rosacea Unna gives ichthyol internally in doses of 5 grains, and prescribes at the same time lotions of the same substance in aqueous solution. At night, the following paste is applied to the affected organ:

℞ Sulphur, ℥ ss.
Rice powder, ℈ iv.
Ointment of zinc oxide, ℥ v.
Mix, and make a pomade.

If the patient is scrofulous or debilitated, he also orders cod-liver oil, syrup of iodide of iron, etc.—*Bacteriological World.*

SOCIETY PROCEEDINGS.

Gynecological Society of Chicago.[1]

Regular Meeting of Nov. 21, 1890.

THE PRESIDENT, DR. W. W. JAGGARD, IN THE CHAIR.

EXHIBITION OF SPECIMENS.—EXTRA-UTERINE PREGNANCY.

DR. C. T. PARKES presented a specimen taken from a case of ruptured Fallopian pregnancy where the history extended back three months, and the symptoms of rupture to three weeks. But three days had elapsed since the operation, and therefore the outcome could not be told.

The second specimen was of a fibroid uterus, removed through the vagina in August last. Electricity had previously been thoroughly tried, but without effect. Upon incising the specimen a small intra-uterine fibroid was found projecting internally, and which could not be cauterized by the intra-uterine electrode.

DR. KARL SANDBERG first offered a specimen of large sized ovarian abscess.

Next was a supposed papilloma of the ovary, removed from a girl sixteen years old, where there had been a history of much pain with marked enlargement of the ovary—since an attack of scarlet fever four years previously.

The third specimen was a tube and ovary apparently normal, but which, from an incomplete history, was evidently the source of the debility and retardation of convalescence from parturition ten months before.

A fourth specimen showed pyo-salpinx, removed three weeks previously. This also followed the puerperal state, and was evidently producing an altered condition of the mind. Since operation, however, all appearances of insanity had disappeared.

DR. HENRY P. NEWMAN read a paper entitled

THE REMOTE RESULTS OF SHORTENING THE ROUND LIGAMENTS FOR UTERINE DISPLACEMENTS BY THE NEWER DIRECT METHOD.

After reviewing a few of the technical points of Alexander's operation, particularly with reference to the initiative steps of finding the chord by deepening the wound to the aponeurosis of the external oblique, and referring to the acceptance of a new method first suggested by Dr. J. Frank, of Chicago, the claim of calling this the "direct treatment" was defended by the following distinctive advantages, viz.: 1. The single sweep or two with which we cut down upon the inguinal canal or the glistening aponeurosis of the transversalis muscle, directly over the internal ring, or canal of Nuck. 2. Through a single nick in the course of the reflected fibres of this aponeurosis the blunt hook may often be passed into the canal and the round ligament pulled out in less time than it takes to tell it; or, by lengthening the incision, it may be exposed along the canal in its entirety. 3. There can be no doubt here of the identity of the ligament, as a duplication of the peritoneum is seen surrounding it at its abdominal extremity. 4. The force used in pulling out the ligament is both brought to bear upon it at its strongest portion and is in a direct line with its intra-abdominal course. This is in strong contrast to the old mode of pulling upon its frayed-out terminal fibres at an acute angle with its inner and stronger portion and over the sharp, resisting surface of the ring. 5. Aided by the sense of sight, and seizing the ligament above the inguinal canal, we can feel assured that we are drawing upon the abdominal portion of the ligament, and not merely stretching its inguinal section. 6. As there are few or no adhesions at this portion, there should be absolutely no tearing of the tissues. Consequently, where aseptic methods are used, there should always be healing by first intention, and drainage and after treatment be relatively simplified. 7. Where the ligament is strong and fully developed, as it is in its upper portion, it can be more securely anchored or made fast to the surrounding tissues. 8. Hernia is guarded against by deep sutures constricting the canal about the internal ring, insuring firm union where most needed. 9. The intercolumnar fibres and tissues about the internal ring are not interfered with or irritated in any way.

The histories of seven cases were given wherein the operation of abbreviating the round ligaments had been performed. In all the cases two years or more had passed since the operation, and the results were shown to be highly successful. In three cases there was retroversion with prolapsus of both uterus and ovaries; in one procidentia with enlarged, tender ovaries; and the remaining number "presented the usual menstrual disorders indicative of the severer types of uterine and ovarian displacements, and were upward of ten years' standing."

DR. A. W. ABBOTT, of Minneapolis, Minn., reported nineteen cases in which he had done the operation up to November, 1888. All of them were for retroflexion, and not for prolapsus. The Alexander method was closely followed, and without the difficulty described by some. He believed that if Dr. Alexander's directions were followed implicitly the operation would be found simple and easy; at the same time he would not disparage Dr. Newman's ideas. Of his nineteen cases in thirteen the normal position of the uterus is maintained, and of these eleven stand improved, and two unimproved. Of those in which the position is not improved, six; in three the symptoms are improved. Of the total number of operations,

[1] Abstracted for The Journal.

the symptoms have entirely disappeared in ten, in four they are improved, and in five not improved at all. Dr. Abbott believed that the results were far better in the parous state; and that manifest adhesions, or the slightest history of a former peritonitis should preclude operative measures.

Dr. F. H. Martin reported the same number of cases as Dr. Abbott, and contended strongly for a proper and thoroughly cautious selection of cases. In cases that were well selected the justifiableness of the operation had been well demonstrated. Dr. Martin believed the operation was well indicated in those cases in which the uterus allowed of replacement and retention by a well-fitting pessary, and that it is only in such cases that it should be done.

Dr. T. J. Watkins had performed the operation a limited number of times, and had had an opportunity of observing its results in a large number of cases. "None of these," he says, "were called therapeutically cured, but in many of them an alleged anatomical cure resulted. The suffering in these so-called anatomical cases is caused, in my opinion, either by adhesions, by mal-location of the uterus, or by continuous strain upon the shortened ligaments, that is, muscular strain."

Dr. H. P. Newman, in closing the discussion, said: "There will always be failures in this operation where it is done for indications that Alexander's operation is not claimed to cure. Where done as a conservative operation for restoring ovaries, their condition not being definitely known, there is always an element of uncertainty and always a possibility of failure; but the failure should not be referred to the operation, but to the judgment of the physician. In regard to the method I have brought forward, the points that I have stated, I think, are well taken, and, if put in practical use, will perhaps be better realized than they can be by simply hearing them tabulated here."

Dr. Bayard Holmes read a paper having the title

THE TREATMENT OF ACUTE ANÆMIA BY INFUSION.

After barely touching the history and uses of transfusion, Dr. Holmes struck out with the statement: "Death from hæmorrhage is due to anæmia of the brain;" and "fatal anæmia may be either quantitative or qualitative." The author then dwelt upon the physiological state and quality of the blood, and the loss, both in volume and constituency, which could be sustained before reaching the fatal point. And in considering the loss of blood as the cause of death in obstetrical and surgical cases, as well as in accidents, and as a factor in protracted convalescence, he felt that its best mode of treatment should be well recognized. If one-half the volume of the blood was to be found in the collapsible veins, it was quite evident that they would be first emptied in profuse bleeding. If an anæmic patient be placed in a vertical position, with the head down, the vessels throughout the three vital parts, viz., the brain, heart, and lungs, will be freely distended with the least amount of blood, and therefore the first indication in severe acute anæmia is to procure and maintain this decubitus. Bandaging the extremities would have quite the same effect.

When these measures fail to meet the requirements of the case, the recourse to the infusion of a neutral salt solution will be found necessary. The amount of salt solution, as well as its concentration, was of some moment. Yet it is not unlikely that the establishment of a quantitative equilibrium will prove but temporarily a relief, inasmuch as the oxygen-carrying and nutritive needs of the circulation are not thereby met. It is then the desired result may be won by the transfusion of defibrinated blood.

The paper concluded with the following aphorisms: 1. In dangerous acute anæmia auto-transfusion should first be practiced. 2. When the lymph spaces are drained, as is indicated by the sunken and drawn appearance of the face, or by the time auto-transfusion has been tried and the symptoms of anæmia persist, infusion of a large amount of 0.6 per cent. salt solution should be practiced. The necessary apparatus is so simple and the danger so remote that this measure should not be neglected. 3. The immediate intra-vascular injection of salt solution or blood for acute anæmia cannot be countenanced in the present state of our experience and knowledge. 4. The value of secondary subcutaneous or intraperitoneal injection of blood in cases of so extensive hæmorrhage that a qualitative anæmia is present after the mechanical needs of the circulation are satisfied, is still conjecture, but certainly such injection of blood should not be practiced until reaction is well restored. 5. The immediate subcutaneous injection of blood diluted with a large amount of salt solution is not contra-indicated, but its value is still problematical. 6. The rotary surgical pump is the most perfect and manageable apparatus yet proposed for subcutaneous infusions and injections of large amounts, and for direct intravascular transfusion.

Dr. Parkes desired to ask the author what local effect the introduction of a quart of the solution had. He referred to two instances where a large quantity of the salt solution was injected to exsanguinated patients, in both of which good results followed.

Dr. F. H. Martin commended the apparatus exhibited by the author of the paper. He also spoke of the very favorable results in a case under his care.

The President mentioned the effect of a pro-

fuse hæmorrhage, and spoke also of the subcutaneous use of the salt solution in a case of profound collapse, and where an almost magical effect was produced.

Philadelphia Electro-Therapeutic Society.

WM. H. WALLING, M.D., SECRETARY.

The February meeting of this society was held at 36 N. Nineteenth St., February 8, PRESIDENT G. BETTON MASSEY, M.D., in the Chair. The minutes of the last meeting having been read and approved, and the Treasurer's report having been received and accepted, the society went into the election of officers for the ensuing year, with the following result:

President, Dr. Matthew W. Grier; Vice-Presidents, Drs. I. P. Willits and Horatio R. Bigelow; Secretary and Treasurer, Dr. Wm. H. Walling; Executive Council, Drs. G. Betton Massey, J. J. Taylor, and W. H. Walling.

DR. MASSEY then read the following paper:

ELECTRO-PUNCTURE OF A CYSTIC GOITRE; DISAPPEARANCE OF BOTH CYST AND GOITRE.

A maiden lady, aged 41 years, was brought to me by Dr. Emily W. Wyeth, Oct. 1, 1889, with an irregularly shaped goitre, about the size of a small orange. The left lobe was much the larger and was the seat of a monocyst of considerable proportions, which had increased very much during the last year, the growth having been noticed about seventeen years. The circumference of the neck at this point was sixteen and three-eighths inches. Treatment was begun by a negative puncture of the cyst with a solid needle, 35 milliampères being used for fifteen minutes. This was followed by a considerable oozing of a straw-colored liquid. Four days later the cyst was evacuated of its contents, measuring an ounce and a half, and 40 ma. negative applied to the cyst walls for ten minutes, by means of the canula acting as an electrode, the latter being insulated as far as the cavity. This procedure was repeated five times subsequently, with current strengths rising to 100 ma., the cavity being permitted to refill after each puncture. Careful measurements showed that the cyst was refilling more slowly after each application, but on Dec. 9 it was decided by Dr. Wyeth and myself to make a free opening and apply the positive pole, by means of a gold bulb electrode, to all sides of the cavity at stated intervals, maintaining free drainage in the meantime. This procedure was required but twice, with currents of 100 and of 50 ma., the drainage-tube, which was most assiduously looked after by Dr. Wyeth, being gradually shortened and removed on the seventh day. During this time the patient suffered a slight rise of temperature, due to a temporary obstruction of the discharge by accidental removal of the tube. By February 21 nothing remained of the growth but a cicatricial lump about the size of a peach stone, and two months later this had also disappeared without further treatment.

DR. GRIER: Has never treated the cystic variety, but has used outward applications on true goitre with currents of not over twenty-five ma. He used tin electrodes covered with muslin, placing the positive pole on the inferior cervical ganglion, and two negative plates upon the tumor, one on each side. The sittings lasted for five minutes each, being repeated three times a week, for from two to three months. Some preparation of the iodides was also used. Favorable results were obtained in about fifty per cent. of the cases.

DR. PETERSON spoke of a case in which the fluid extract of ergot was used, with good effect, being applied to the tumor upon the positive pole.

DR. BIGELOW: There is a canton in Switzerland in which you cannot walk out without meeting a goitre. The disease is not confined to those who drink the waters, neither to those who carry heavy burdens on their heads.

Dr. Bigelow could not see why the same treatment should not be followed in a fibroid in the neck, as well as in any other part of the body.

In a cystic tumor the action of the current was: 1. Electrolysis. 2. The arresting of secretion, and 3. To compel absorption. He also thought that constriction should act well in such cases. Neggaroth uses the faradic current in overcoming ovarian cysts. He applies the negative pole to the ovaries, per vagina, and the positive on the abdomen, using swelling currents for an hour at a sitting, obtaining good results in six weeks. It must be the heavy voltage that acts so favorably, and if in one case, why not another?

DR. GRIER had used faradism in goitre, but abandoned it on account of its unpleasant effects.

DR. WALLING: Dr. Massey says that he emptied the cyst before applying the galvanic current. We must be guided by experience, as well as by theory. Why was the positive used? Was not the negative pole the one indicated? In the treatment of hydrocele, Dr. Walling does not drain the sac, unless it is extremely distended, and then but little. Use the negative needle in the tumor, and the positive on the thigh, with a current strength of fifteen ma. for fifteen or twenty minutes. He had excellent results in such cases. Scarcely any inflammation followed, and the contents of the cysts were rapidly absorbed, with obliteration of the sacs.

He had used the strong faradic current, but saw no benefit from it, although it caused strong contractions of the muscles. Why not treat other cysts in the same way? You cannot reach all parts of the surface of the sac, after emptying it, while some parts would be unduly acted upon,

tending to set up too much inflammation. What better electrolytic than the fluid in the sac, thus reaching every portion alike.

DR. MASSEY said he was disposed to regard the faradic current as of no value in cystic tumors; but in one case, where a cyst developed in a fibroid, he used a strong faradic current with great advantage. He regarded aseptic aspiration, followed by electrolytic puncture, as the best procedure in cystic conditions.

FOREIGN CORRESPONDENCE.

LETTER FROM LONDON.

(FROM OUR REGULAR CORRESPONDENT.)

The Physical Advantages of Abstinence—The New Fashion of Naming Bazaars—What a Spell of Severe Weather Cost the Metropolis—Low Death-Rate in the British Army—The Gull Studentship in Pathology—Ether Drinking in Ireland The Barber-Surgeons of London—Female Nursing Service in India—Dr. Koch has a Rival at Edinburgh.

At a meeting recently held for the consideration of the physical advantages of abstinence, the chair was occupied by Dr. B. W. Richardson, who in opening the proceedings detailed some of the researches which he had made at the instance of the British Association in 1863, when he was requested to continue his inquiries into the action of various chemical substances on animal bodies. His observations led him to the conclusion that the effect, even in strict moderation, of alcohol was invariably to reduce the temperature of the body, whilst it neither tended to promote its muscular development nor strengthen its vital power. Dr Norman Kerr directed his remarks chiefly to young men, and he pointed out that the habitual use of alcohol led to the augmentation of the non-reasoning connective tissue of the brain, with the consequences that there was found to be a perceptible dwindling of and alteration in the shape and power of the reasoning cells of the mind, and he thought that the best physical condition was only to be attained by uncompromising total abstinence from all intoxicating liquors.

In accordance with the new fashion of naming bazaars like dramas, or tales, or other works of art, the title "A Dream of Health for Sick Children," has been hit upon for one at which all of the stalls will represent scenes from the works of Charles Dickens. The bazaar is to be held under royal patronage at Kensington Town Hall, in aid of the fund for furnishing the Convalescent Home for the Victoria Hospital for Children at Broadstairs, Kent. A special feature will be a stall devoted to dressed dolls. Any dolls not disposed of at the bazaar will be distributed among the children of the Victoria Hospital, Chelsea.

They are now able to tell approximately what the late spell of severe weather has cost the metropolis in lives lost. The first distinct increase of mortality due to the cold was shown in the record for the week ending December 20, when the death-rate had jumped from 21.1 to 26 per 1,000. It reached its maximum, 29.7, on January 3, and the last week of the frost it fell to 25.7. For the six weeks the average rate was nearly 27.7, an increase over that hitherto prevailing of rather over 1.5 per 1,000 per annum. What this means applied to the 3,815,704 inhabitants of London embraced in the returns is that frost, snow and fog have carried off about 2,860 victims in the six weeks. It was a curious circumstance that during the same period zymotic diseases were less fatal than usual.

The death rate in the British Army, as compared with those of Germany, France, Austro-Hungary and Belgium, is extremely low. For last year the death-rate of the British Army was .86 per cent. of the whole, whilst Dr. Corput, who has been charged by the Belgian Government to examine the sanitary institutions of Germany, states in his report that the annual army death-rate of Germany is 3.97, of Belgium 4.07, of France 5, and of Austro-Hungary 5.95 per cent.

Sir William Cameron Gull has founded a Gull studentship at the Medical School of Guy's Hospital, with which his father, Sir William Gull, was so long and so honorably connected. The studentship will be of the yearly value of £125, with a further allowance of £25 for apparatus. The appointment will be tenable for three years, and may be renewed for two years more. The student will not be selected by examination and the appointment will be open, though preference will be given to a suitable candidate from Guy's Hospital. The foundation will worthily commemorate the late Sir William Gull's love for pathological studies, as well as his long tenure of office as physician to Guy's Hospital.

Never, perhaps, has the direct relation between death and overcrowding been more strikingly presented than in a little table compiled by Mr. C. Roberts, and included in an article by him in the new paper entitled *Physique*. It relates to the sanitary districts of London, and shows, among other suggestive facts, that whereas in Hampstead, where the allowance of space is 180 square yards to every inhabitant, the death-rate is only 10.5 per thousand per annum, in the Bethnal Green condemned district, where the allowance is 13 square yards only per person, the death-rate is just 40 per thousand.

Ether drinking is practiced largely throughout many districts of Northern Ireland, notably in Derry and Tyrone. According to a Government report, some 100,000 Irish consume 17,000 gal-

lons of impure ether annually, and it is proposed to counteract the baneful habit by introducing naphtha into all ether sold otherwise than medicinally, or else to limit the sale to chemists.

In these days of higher development of the medical art, the idea of associating surgeons with barbers is apt to raise a smile. But however widely the ways of doctors and barbers may now differ, there was a time when the wielders of the lancet were allied by the most solemn ties to the manipulators of soap and razor. The records of the ancient city guilds show how jealously the privileges of these members of society were formerly guarded, and in perusing the volume of "Annals of the Barber-Surgeons of London," compiled by Mr. Sidney Young, one may gain a more particular knowledge of the history of a venerable yet utilitarian craft. The author points out that the barber-surgeons were a professional rather than a trade guild, and their company stood alone as the pioneer of technical education. As long ago as the middle of the fifteenth century the company provided surgical lectures and systematic instruction for its members. Museums, libraries and anatomical theatres were established, and a valuable amount of lasting work was done which benefited the Kingdom at large. Mr. Young holds that the barbers were banded together as early as the thirteenth century. The first record of the company's existence as a trade society bears the date of 1308. The barbers performed many of the minor operations of surgery, such as bleeding, tooth drawing and cauterization. Up to the twelfth century the only reliable surgeons were the clergy, but the Council of Tours held that blood-letting was incompatible with the office of priesthood. At the present time the chief treasure belonging to the Company of the Barber-Surgeons is the well-known famous painting by Holbein, 10 ft. 2 in. long by 5 ft. 11 in. high, which represents either the granting of the charter by Henry VIII or the Royal assent to an Act of Parliament uniting the Barbers' Company with the Guild of Surgeons. The picture is painted on oak panel, and contains nineteen figures. Mr. Young has much that is interesting to say concerning the property, charities, plate, pictures and general features of the Company as it exists to-day.

Through the instrumentality of Sir Frederick Roberts, the Government of India has organized a "female nursing service" for the army hospitals of that country. The nurses to be employed are, it is said, ladies who will be required to show that they have undergone training for at least twelve months in a civil hospital in England in which male patients receive medical and surgical treatment. The scheme constitutes a modification of that inaugurated by Lady Roberts. The number of nurses to be employed will be fixed by the Government. For administrative purposes the service will be divided into four circles, each under a superintendent, with their headquarters at Meerut, Rawal Pindi, Bangalore and Poona.

Dr. Koch has just reached the age of 42. His father was a mine manager, and young Koch had a hard struggle in his profession. Having passed through the university, he finished his medical education in Hamburg Hospital, and then started as a country doctor in Hanover. He was restless in the provinces, however, and changed several times before he landed in Berlin.

Dr. Koch has a rival in Dr. Russell, of Edinburgh, and Dr. Russell in his turn has a rival in Dr. Stills. A Scotch paper says that considerable discussion has been aroused through a rumor having gained currency to the effect that Dr. H. I. Stills had arrived at the same conclusions as Dr. Russell concerning the extermination of cancer some time ago, and was only awaiting further confirmation before announcing it.

G. O. M.

ASSOCIATION NEWS.

American Medical Association.

Members who intend to read papers before the Section on Practice and Physiology are requested to send titles to the secretary at their earliest convenience, so that by grouping allied subjects and giving timely notice of the programme the work of the Section may be facilitated and the interest of the meeting increased. By request of the chairman.

GEORGE DOCK, M.D., Sec'y,
Galveston, Texas.

SPECIAL CORRESPONDENCE.

Legal View of Insanity Commitments.

To the Editor:—In reference to your editorial citation of David McAdam's (at present Judge of the Superior Court of New York) "Legal View of Insanity Commitments," permit me to state that they have become a laughing-stock among all judges, lawyers and physicians who have any knowledge of the subject-matter, or familiarity with the daily and hourly emergencies to which the physician called upon to deal with the problems of insanity is exposed. His loud and positive declarations were the outcome of an agitation of the subject, provoked by the publicity given to the commitment of one of my private patients. The learned judge has construed for himself a remarkable dilemma. On the one hand he states that his judicial action added no force to the commitment, and that he had indulged in this action in 7,000 cases, on the other he—or at all events the Court over which he presides—becomes the medium to give publicity to what a certain sense of propriety which has thus far appeared to guide our judges, regards as a private, family matter. That the judge assumes no responsibility is correct; it is the physicians who are responsible, and whom the law registers the responsibility of by compelling them to comply with the existing legal forms. It is to be

hoped that—not further hampering legislation, as a few demagogues in our State Senate are attempting to impose—but some measure be adopted to protect physicians against such outrageous and libellous publications as the indiscretions of the legal officers exposed them to, in the very case which led to Judge McAdam's gratuitous farrago.

E. C. SPITZKA, M.D.

New York, February 26, 1891.

The Treatment of Carbuncle.

To the Editor:—Under the head of "Practical Notes" in a recent issue, we will all agree with Dr. A. P. Brown in his treatment of carbuncle, as far as crucial incision, use of cocaine, and packing with salicylic acid are concerned; but as for applying a *dirty ointment* to an *open wound* the modern surgeon will most decidedly disapprove of. A better procedure would be, first scrub with soap and $Hg.Cl_2$ 1-1,000, anæsthetize with cocaine, incise, curette, swab with tr. iodine, pack with iodoform gauze and apply a *moist* dressing of $Hg.Cl_2$ 1-5,000 or carbolic acid 1 per cent.; the latter will lessen pain. Remove dressing once in a day or so, and reapply tr. iodine if necessary and proceed as before.

RALPH CHANDLER, M.D.

135 Grand Ave., Milwaukee, Wis., Feb. 27, 1891.

Shall The Journal be Removed to Washington?

THE ACTION OF THE MCLEAN COUNTY MEDICAL SOCIETY. BLOOMINGTON, ILL.

To the Editor:—The following resolutions were unanimously adopted at the regular monthly meeting of the McLean County Medical Society, Thursday, March 5, 1891:

WHEREAS, There is an effort being made to remove THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION from Chicago to Washington, D. C.

WHEREAS, The American Medical Association is no sectional body, and when we consider Chicago from its geographical location, so readily accessible from all parts of our country, it being the greatest railroad centre in the world, its unsurpassed mail facilities, and destined to become the greatest medical centre of our country, also in wealth and population,

Resolved, That the Members of the McLean County Medical Society cannot see what advantage THE JOURNAL could possibly gain by its removal to Washington, but believe that such removal would be detrimental to THE JOURNAL and interests of the Association, and, be it further

Resolved, That the delegates elected to attend the next meeting of the Association do all in their power to oppose the removal of THE JOURNAL.

G. M. SMITH,
RHODA GALLOWAY
F. J. PARKHURST, Committee.

To the Editor:—I have always felt the deepest interest in the creation of a journal that would represent the medical living age: around which would be rallied the most cultured minds and ardent efforts of the medical profession in this nation, and which should represent, besides, the most advanced thinkers and workers in all the world. When, therefore, the proposition was brought forward to create THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION, I became its enthusiastic supporter and predicted, confidently, its future triumph as the representative of the medical interests throughout the country; and now my judgment is, that it has done well—reflecting great honor upon its editors, the Board of Trustees and Chicago, where it has been so well carried on. Nevertheless, I am bound to say that, in my belief, the managers have been so conservative, so determined to take no risks that involved a prospect of pecuniary embarrassment, that THE JOURNAL has been kept too much in the rear of the line of a contest for the due rank of medicine in communities and in the State. It has not, I think, been full enough of an aggressive spirit; nor has it presented early, and in a compact form, the medical progress at home and abroad. The great reason for this, I am sure, has been that the managers have never felt willing, or, I might say, able—to select a highly competent editor, who should direct its way and be held responsible for a high character of work.

No one doubts the editorial capacity of Dr. N. S. Davis, or Dr. Hollister, but these gentlemen, both are large practitioners and could not have afforded to give their entire time to so exacting a situation. Hence THE JOURNAL, excellent and able as it is, has not attained to the exalted position of the leading journal of this country.

Now, this is what THE JOURNAL must become to be commensurate with the spirit and demands of our profession here. Thus far THE JOURNAL has stood only as the child of the Association—nursed by it—not self dependent, but sustained by the funds remaining in the treasury after all other claims had been satisfied. But now a new state of things should be inaugurated. THE JOURNAL must lead and sustain the Association; it must earn the necessary sums to give to it the broadest character and most elevated rank in the promotion of scientific medicine, and its due social and political influence in the State. It must be able, by its great strength and activity, to fuse into one mass the intelligence, feeling and force of our vast faculty. Our obligations to society are continually increasing; the elevation of the social and political State requires, in a great degree, our coöperation.

The time has come for medicine to demand a place in the administration of the most important affairs. We must insist on the creation of a secretaryship of Public Health, as fully empowered with responsible duties as any other in the Presidential Cabinet.

I suppose that this proposition will be met by derisive jests and supercilious exclamations; nevertheless, the fact remains that there is no other profession that excels ours in positive efficiency to sustain public order, comfort and virtue. We have vast capacities for the direction of society and the promotion of human happiness. At this time I cannot dwell but in a general way upon this topic. Give us the power to direct all that which constitutes hygienic laws—the control of the mode of living of the people: *e.g.*, to secure unadulterated food, pure water, ample light and air space in their dwellings, drainage, disposal of excrement, garbage and offal of every description, regulation of the hours of labor, the protection of childhood from severe toil, quarantine against pestilence, isolation of infectuous diseases, the disinfection of certain localities, the overcrowding of school rooms, the abuse of the brain in teaching, the prevention of marriage in hereditary diseased types of constitution and in cases of near consanguinity, the care of the sick, and of the insane in special and general hospitals, and the regulation of those two giant evils of civilization, intemperance and prostitution.

At this moment the profession is manifesting, in a higher spirit than ever before, the purpose of suppressing contagious and infective diseases. This work was begun by Jenner, a century ago, and the awful scourge of smallpox has been nearly stamped out, wherever vaccination is compulsory. We have now assumed the stupendous task of suppressing all the terrible diseases that desolate the world. To accomplish all this we ask for the facilities of the government and the power of law. We must assist, also, in the formulation of appropriate laws and in their effective application.

I affirm that the medical profession is worthy of full recognition by the State in its Councils and by its resources to carry forward its beneficent work. Moreover, our profession lives closer to the heart of humanity than any other. We are bound to lavish our consolatory art upon all races and ranks of society, alike. We cannot abandon the lowest, most degraded, the poorest and most criminal of our fellow beings. We cannot shrink from impact with the pestilence, or the terrible ordeal of battle. It is not the bugle note of "forward," the advance

of the standards, or the roar of the conflict, that excites our enthusiasm; it is the cries of the wounded and dying, the fearful ruin of the field that sustains our energies in the smoke and flame of battle.

During all the dread scenes through which we have so lately passed, the physicians on both sides gave their best services to friend and foe alike; and, when the conflict was over, they were the first to extend the fraternal hand across the red field of war. It is my opinion that, to-day, the strongest bond of union in these United States is the medical profession, founded upon their high order of culture in the "humanities," in science, and that deep sense of sympathy and good-will to men, which makes war abhorrent.

We are often discouraged by seeing our advice disregarded, and feel that our profession does not command properly public confidence. Our opinions, it is said, are unreliable in comparison with other learned professions. We declare this to be unjust. We do not claim that medicine is perfect; we feel its deficiencies; yet we know that a steady and brilliant growth exists, and that, in every respect, we are abreast with other professions. When we compare our opinions with those of lawyers, theologians, statesmen, merchants, manufacturers, civil engineers, etc., we find that all these are tainted with as much uncertainly as our own. Why should not scientific medicine be of equal certainty? We employ the same logical processes in solving the problems of disease as those ma le use of by all investigators in serious questions. We employ the methods of the calculus in clinical investigations, like those followed by astronomers in solving the problems in celestial mechanics.

Hence, it seems to me a duty on the part of the medical profession to strive for a substantial representation in the Cabinet, in the Senate and House of Representatives, in Congress, by men who shall be distinguished for professional ability and general knowledge of affairs. We know the exalted position held by Rush in the Continental Congress. Since his day a number of distinguished medical men have sat in the Senate and in the House, but their number has decreased since the rancor of partisan politics has become so bitter and the glut of wealth has pushed aside the most capable men, because they have not a money power to back them.

In the British Parliament we see a steady increase in the medical representation. Trousseau, Paul Bert and Nélaton were Senators of France. Virchow has served in German, and Semmola in Italian Parliaments. Who, that recalls all the qualities of Gross, Eve, Flint and H. Campbell, can doubt the high rank they would have held in our Senate. The influence of our Association accomplished the elevation of the surgeons of the Army, Navy and the Marine Corps to increased rank and pay.

In regard to the location of THE JOURNAL.

We are all proud of the greatness and splendor of Chicago: she is a wonder of the world; for certainly, no city in the world's history has had as rapid a growth and has so fully developed and maintained as massive a trade in manufacturing and mercantile pursuits. Moreover, it is plain that in the arts and sciences she is making rapid progress—aiming to make the place a seat of learning as well as of commerce. No one can visit that wondrous city and become involved in the ebb and flow of her busy streets, travel through her great avenues and parks, without seeing the most convincing proofs that her stupendous affairs are being directed by minds of vast capacity and activity.

Nevertheless, the consciousness of Chicago is not equal to the consciousness of the Nation—whose central point is Washington. The correspondencies of the latter are illimitable. All roads lead to the Capital: *there*, is our father's house, and *there* we are all at home.

The assumption of our higher claims for social and political recognition must first be made good *there*, in order to make them successful; and THE JOURNAL of the Association shall become our potent advocate. Nowhere else can it exert so great an influence—neither at Chicago, New York nor Philadelphia. I pray our brothers of the Northwest—of which Chicago is conceded to be the capital—to give their good-will to this new movement; not forgetting, though, the honor which Chicago has given to the foundation of the Organ of the Association.

No one of a generous nature, I hope, will asperse this movement towards Washington as one that will lower our noble profession to the plane of common politics. No, we despise the intimation: the politics we shall struggle to develop will be the elevation of medical administration to its proper place as an integral part of public affairs for the promotion of public well-being.

If a general and hearty consent to the removal of THE JOURNAL from Chicago to Washington shall have been agreed to, then the general business management of the Organ and its editorial work will become most important subjects of consideration.

The business management is of the first importance; not second, I think, to the purely editorial; but both must be made the strongest possible and coöperative: and the gentlemen who obtain these places must be paid sufficiently to give THE JOURNAL their entire time. I mean that they shall have no other employment—Governmental or otherwise. In fact, as I see it, their duties shall absorb all their capabilities; and in the editorial work, more especially, large assistance will be required.

In order to secure the best talent for the editorial department, more funds than are now at the disposal of the managers, must be provided. I propose, for this purpose, that an appeal be made to the members, at large, for a loan of $10,000, in sums of $50 and $100, to be returned in due time with interest at 3 per cent. If one hundred persons can be found who will thus loan $100 each, it will meet the appeal. Professional hope and pride will surely answer such a call, promptly. In this way the whole present income could be devoted to the enlargement of the paper.

The profession in this country needs a journal as great in size and in capacity as that of the British Association. We have the men, the money, and certainly the patriotism. It must and can be made so strong as to become indispensable to the practitioners in our land.

It will become, in nowise, the overpowering rival of our present capable and ably conducted local journals; it will not deprive them of their patronage, professionally or in a business way; and I hope that gradually, it would be able to drop the greater part of its advertisements.

Every practitioner knows that his greatest success depends upon his standing in his own community; so his best productions must be made known to his professional brothers at home. But there are subjects about which he may desire to address the profession at large; in that case THE JOURNAL of the Association would be his vehicle and give him an audience commensurate with the nation. Proceedings of the leading medical and scientific societies, and reports of the great general hospitals, should be promptly displayed in its columns; and the subscribers would, in this way, become furnished with the work of eminent men, here and abroad. Careful reviews of new books should also be produced. It seems to me that not only local journals will be better patronized, but the proceedings of State and local societies will become much more valuable.

In short, when THE JOURNAL shall have been fully equipped, the subscribers shall be kept *au courant* with the progress of medicine in all the States and cities at home and abroad.

We have, in the famous journal of the British Medical Association, an example. It struggled from 1854 to 1867 on the same plane, nearly, as ours; but, when in 1867 Ernest Hart was made editor-in-chief and Francis Fowke it business manager, its whole career was quickly changed; the quantity of its printed matter was, at once,

increased and has been more than doubled, so that, now it prints 3,000 pages a year, and its contents include the whole progress of medical science. Its subscription list is about seventeen thousand, and its annual income, including advertisements, is over $130,000. Its surplus income has accumulated, I understand, to some $200,000, the interest of which is employed in many ways, to enlarge medical culture and take care of professional interests in the government. The influence of such a medical organ, and its power for doing good is incalculable. When, during the past year, the General of the Army, Lord Wolseley, issued a general order, the operation of which was sure to lower the status of the medical corps, *The Journal* promptly but respectfully protested against its execution and secured its modification.

Our great Association, many are saying, has been gradually losing influence in the profession at large. A slow and somewhat insidious disintegration has been manifested for some time past. I have heard it said that, with the death of its eminent founder, there is great possibility of it ceasing to exist. Everybody knows that his indefatigable labors have done vastly much to keep it alive. The indications of decay, it is said, are more especially seen in the formation of so many new societies, seminational in character, and in the fact that large numbers of distinguished physicians and surgeons stand aloof, and do not participate in its annual meetings as in the past years.

In short, they assume that the Association is not regarded, nowadays, as indispensable for the unification of medical interests as formerly. Its associations are agreeable enough, it is said, but that it is no longer the centre of centripetal and centrifugal forces for the maintenance of our medical system; that were it not for the opportunities it affords for cheap travel to our great cities, the recreation, and the entertainments, which give variety to pleasurable journeys, it would soon go to pieces.

There is no thoughtful man, I think, who could regard the suspension of these annual meetings in any other light than as a public and professional calamity. What the Association has done for the elevation and unification of the profession, I have no space to recount; moreover, I believe that its power to do good could never have been exerted to a greater purpose than at this time. It has required many years to formulate all the methods for its government and higher work. It can and must be made so powerful in promoting a broader and more scientific scholarship, that the fraternity shall, at length, gain the public estimation as the most highly educated and trustworthy class of citizens of the Republic. It must command so much professional regard that every member of the fraternity shall give it his profound reverence, and consider it one of his highest titles to distinction to be a corporate fellow.

With higher culture of professional *esprit de corps*, and sustained by a powerful organ, there can be no aspersion by, nor combination of sectarian or irregular practice, nor any display of self-importance by individuals, or groups of regular physicians who hold themselves apart in haughty satiety, that can restrain the fulfillment of the beneficent aims of the American Medical Association.

If its great purpose can be accomplished in Chicago, let it remain; but I repeat, the consciousness of Chicago is so immensely inferior to that of our political capital, that I hope that all of us may see that the great destiny of the Association may more surely be accomplished at Washington. CORNELIUS G. COMEGYS, M.D.

Cincinnati, Feb. 20, 1891.

To the Editor:—THE JOURNAL, has the most favorable geographical and business location that could be found in the United States. THE JOURNAL has been a success from the very beginning, and has a history of which its friends may well be proud. It has appeared regularly, and its pages have always been filled with matter that deserves to be read by every progressive physician. The editorials compare well with those of any medical journal published in the East.

I am satisfied that if the future location of THE JOURNAL would be left to a vote of every member of the American Medical Association as it should be, nine out of every ten votes would be cast for Chicago.

If our brethren in the East wish to make THE JOURNAL what every member and the Supervising Editor wants it to be, let them contribute scientific articles for its columns, which will be eagerly read and thoroughly appreciated by every member of the Association, instead of wasting time and talent in criticising the present management. N. SENN.

Milwaukee, March 4, 1891.

To the Editor:—It was resolved, at a recent meeting of this Board, that it is the desire of this College that the place of publication of THE JOURNAL remain in Chicago.

W. F. MILROY,
Secretary Board Trustees,
Omaha Medical College.

Omaha, Neb., March 4, 1891.

To the Editor:—I think that Chicago is much the better place for the publication of THE JOURNAL, it being the most central and most convenient place. I have written to the different members of the Board of Trustees, expressing my views on the subject.

The membership of the American Medical Association is made up largely of physicians who live in the West and South; the most active work in the Association is done by members who live in the territory tributary to Chicago, and I am quite certain it will be found that a vast majority of the members of the American Medical Association wish to have THE JOURNAL published in the future, as it has been in the past, in the city of Chicago, and would look with jealous eyes upon any attempt to remove it elsewhere. They will certainly most bitterly oppose any attempt to remove it farther East.

St. Paul, Minn., March 2, 1891.

JOHN F. FULTON, M.D.

To the Editor:—The American Medical Association may now be considered a success. THE JOURNAL, published where it has been, in Chicago, and edited as it has been, has contributed more to accomplish this end than any other and all other influences combined. Believing this as strongly as I do, I say let it alone! All things that are doing well should be let alone. Chicago is nearer the home of the great number who contribute to the make-up and support of the Association than New York, Philadelphia, or Washington City would be. Men will support home matters better than they will more distant ones.

Dr. N. S. Davis, of Chicago, has done more to make the Association a success than any other man. Why should he be thus insulted and his home despised? I for one am opposed to this high-handed outrage.

ROBERT CRAWFORD, M.D.

Cooperstown, Pa., March 3, 1891.

To the Editor:—Deeply interested in every move likely to contribute to the enhancement of material and scientific interests of THE JOURNAL we regard as the exponent of the best literary and scientific culture of the first, best and largest medical organization of our country, I cannot but enter my personal protest against the removal of the "plant" and editorial management of THE JOURNAL from Chicago to Washington, D. C. Certainly no man of broad scholarship, literary and scientific culture, can find one incontrovertible argument in favor of the contemplated change. In every element of material

advantage, and facilities for ready and quick distribution, no city in our country, when we regard THE JOURNAL'S constituency, is comparable to Chicago. And I feel assured no man will have the temerity to deny us such a measure of classical, special and general scholarship as render secure the best educational interests of this representative journal? Central, ambitious, progressive, our city furnishes all the splendid environments calculated to inspire the best editorial management. I vote for Chicago! WILLIAM T. AKINS, M.D.

Chicago, March 7, 1891.

To the Editor:—It is my opinion to the best interests of THE JOURNAL to have it remain in Chicago. The geographical location of Chicago is superior to Washington or any *other city*. It being the great commercial centre of the Northwest, and a centre for medical education. Hence it would not be advantageous to the interests of the Association, and a detriment to the financial interest of THE JOURNAL, depriving it from a large legitimate advertising patronage, a factor in support of THE JOURNAL.

The editorial department has been well managed and gives, I believe, general satisfaction to the majority of the members of the Association. It would be wise to let well enough alone. THOS. W. FORSHEE, M.D.

Madison, Ind., February 26, 1891.

To the Editor:—I am in favor of keeping THE JOURNAL where it now is. B. F. ROLFE, M.D.

Staceyville, Ia., March 6, 1891.

MISCELLANY.

DR. HOSMER ALLEN JOHNSON.—At a recent meeting of the Council of the Northwestern University it was

Resolved, That by the death of Hosmer Allen Johnson, A.M., M.D., LL.D., the Northwestern University has lost one of the most active and efficient founders and supporters of its medical department, an active and wise member of its Board of Trustees and Council, and an influential patron and friend of all its interests; the medical profession one of its most learned, skilful and honorable members; the city and State one of its most enlightened, patriotic and useful citizens; the cause of education and sanitary science one of their most earnest supporters; and his family one of the most unselfish and affectionate of husbands and fathers.

Resolved, That the foregoing be entered upon the records of this Council, and a copy of the same transmitted by the Secretary to the family of the deceased, and a copy furnished for publication in the medical journals.

LETTERS RECEIVED.

Antonius, Ill.: Dr. A. Moll.
Arcadia, Wis.: Dr. G. N. Hidershide;
Ardmore, Pa.: Dr. J. S. Gerhard.
Auburn, N. Y.: Dr. J. P. Creveling.
Baltimore, Md.: James O'Connor.
Boston, Mass.: Dr. A. C. Garratt.
Brooklyn, N. Y.: Dr. Mattison, Dr. R. M. Wyckoff.
Buffalo, N. Y.: Ross, Daniels & Co.
Burlington, Ia.: Dr. M. B. Tuttle.
Cat Creek, Ky.: W. A. T. Mansfield.
Charleston, S. C.: Dr. C. W. Kollock.
Chicago: Dr. W. E. Casselberry, Dr. Viola M. French, Moses P. Handy, Dr. W. Whitford, Dr. J. C. Hoag, Dr. J. G. Bemis.
Cincinnati, O.: Dr. G. A. Cullen, Cincinnati Public Library.
Cleveland, O.: Dr. D. P. Allen.
Content, Texas: Dr. W. B. Anderson.
Davenport, Ia.: Dr. W. R. Alexander.
De Kalb, Ill.: Dr. E. L. Mayo.
Detroit, Mich.: Parke, Davis & Co.
Edisto, S. C.: Dr. J. C. Woodruff.
Elkhorn, W. Va.: Dr. J. A. Reyburn.
Elmo, Ky.: Dr. J. P. Thomas.
Etna, Cal.: Dr. C. W. Nutting.
Fort Dodge, Ia.: Anton Rank.
Fulton, N. Y.: Dr. N. F. Hall, Dr. C. G. Bacon.
Grand Rapids, Mich.: Dr. Reuben Peterson.
Greely, Colo: Dr. J. P. Wallace.
Greensburg, Pa.: Dr. J. C. Keffer.
Grove City, Ill.: Dr. R. S. Anderson.
Harold, Neb.: Willie Calkins.
Hartford, Conn.: Plimpton Mfg. Co.
Hartland, Vt.: Dr. D. F. Rugg.
Judson, Ind.: Dr. J. T. Ball.
Kansas City, Mo.: Dr. M. A. Bogie.
La Crosse, Wis.: Dr. Chas. Ottilie.
Lebanon, O.: Dr. C. A. Hough.
Lincoln, Neb.: Clasen & Fletcher, Dr. G. H. Simmons.
Louisville, Ky.: J. A. Flexner, Paul Kratz, Dr. W. Walling.
Loveland, O.: Dr. H. H. Peachy.
Maroa, Ill.: Dr. E. A. Morgan.
Marshall, Mich.: Dr. G. H. Greene.
Mendota, Wis.: S. J. M. Putnam.
Miamisburg, O.: Clarke, Forbes & Co.
Milwaukee, Wis.: Dr. E. W. Bartlett.
Mt. Lebanon, La.: Dr. T. J. Fouts.
Mt. Pleasant, Iowa: Dr. F. P. Peck.
Newmarket, Eng.: Dr. G. O. Mead.
New Orleans: Dr. M. J. Magruder.
New York City: Robinson-Baker Advertising Bureau, Reed & Carnrick, New York and Chicago Chemical Co., J. H. Bates, Dr. E. Steiglitz, J. Movius & Son, W. P. Cleary, Dauchy & Co., The U. S. Mail, Geo. P. Rowell & Co., Boehringer & Soehne, B. Westermann & Co., N. Y. Post-Graduate Medical School, J. F. Madden.
Omaha, Neb.: Dr. R. C. Moore.
Ottawa, O.: Dr. C. E. Beardsley.
Paris, France: Rigaud & Chapoteaut.
Peninsula, O.: Dr. W. N. Boerstler.
Phila., Pa.: Dr. R. J. Dunglison, Dr. Edward Jackson.
Pikesville, Pa.: Dr. W. D. DeLang.
Pittsburg, Pa.: Remington Bros., Western Pa. Medical College.
Quincy, Mich.: Bennett's Newspaper Agency, Dr. M. F. Bassett.
Rock Rapids, Ia.: A. M. Vail.
St. Louis, Mo.: Dr. Wm. Dickinson, Battle & Co., J. H. Chambers & Co., A. L. Pope, Dios Chemical Co.
Salem, Mass.: Dr. Wm. M. Parker.
Spokane Falls, Wash.: Dr. R. S. Thomson.
Stanford, Ky.: Dr. J. G. Carpenter.
Tecumseh, Mich.: Dr. Geo. Howell.
Titusville, Pa.: Dr. T. J. Young.
Warrensburg, O.: Dr. Wm. McIntyre.
Washington, D. C.: Dr. S. M. Burnett.
Zanesville, O.: The Courier Co.

Official List of Changes in the Stations and Duties of Officers Serving in the Medical Department, U. S. Army, from March 1, 1891, to March 6, 1891.

Major Samuel Horton, Surgeon, is granted leave of absence for two months, on surgeon's certificate of disability. By direction of the Secretary of War. Par. 7, S. O. 49, A. G. O., Washington, February 4, 1891.

Capt. William O. Owen, Jr., Asst. Surgeon, is relieved from further duty in the Dept. of the Missouri, and will report in person to the commanding officer, Jefferson Bks., Mo., for duty at that station, and by letter to the Superintendent of the recruiting service By direction of the Secretary of War. Par. 2, S. O. 44, A. G. O., Washington, February 26, 1891.

The following named officers, having been found by Army Retiring Boards incapacitated for active service on account of disability incident to the service, are, by direction of the President, retired from active service at this date, under the provisions of Section 1251, Revised Statutes: Capt. J. Victor De Haune, Asst. Surgeon, and Capt. William R. Steinmetz, Asst. Surgeon. Par. 18, S. O. 44, A. G. O., February 26, 1891.

Major Henry M. Cronkhite, Surgeon, will report in person to the commanding officer, Ft. Adams, R. I., for temporary duty at that post, until the arrival of a successor to Major Samuel M. Horton, Surgeon, when he will return to his proper station. By direction of the Secretary of War. Par. 8, S. O. 45, A. G. O., Washington, February 27, 1891.

Capt. Frederick W. Elbrey, Asst. Surgeon, having been examined by a board of officers and found physically disqualified for the duties of a surgeon with the rank of Major, by reason of disability incident to the service, is, by direction of the President, retired from active service with the rank of Major, under the provisions of the Act of Congress approved October 1, 1890, to date from February 24, 1891, the date from which he would have been promoted to the grade, by reason of seniority, if found qualified. Par. 1, S. O. 45, A. G. O., February 27, 1891.

The following named officers having been found by Army Retiring Boards incapacitated for active service, on account of disability incident to the service, are, by direction of the President, retired from active service this date, under the provisions of Section 1251, Revised Statutes: Major William S. Tremaine, Surgeon; Major Leonard Y. Loring, Surgeon. Par. 19, S. O. 45, A. G. O., Washington, February 27, 1891.

Capt. William B. Davis, Asst. Surgeon, the extension of leave of absence granted in S. O. 22, Div. of the Atlantic, February 5, 1891, is further extended one month. By direction of the Secretary of War. Par. 7, S. O. 46, A. G. O., Washington, February 28, 1891.

Major Henry Lippincott, Surgeon, is relieved from duty at Ft. Union, N. M., to take effect upon the final abandonment of that post, and will then proceed to Ft. Adams, R. I., and report in person to the commanding officer of that post for duty as Post Surgeon, reporting by letter to the commanding General, Div. of the Atlantic. By direction of the Secretary of War. Par. 9, S. O. 46, A. G. O., Washington, February 28, 1891.